

iControl

Signal and facility monitoring

Supported Device Reference Guide

(Preliminary)

M226-0900-111

19 December 2014



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Supported Devices

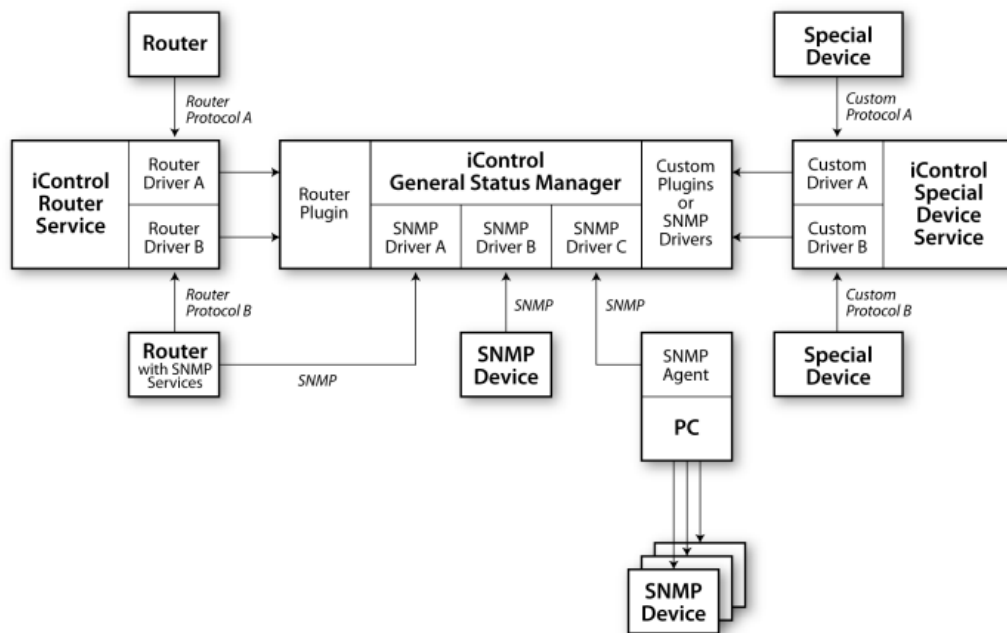
The purpose of this document is to provide an overview of the devices supported by iControl, including specific details on available alarms and their parameters.

Overview

iControl is capable of monitoring and controlling a large and growing number of devices, that fall into three categories:

- routers
- SNMP devices
- special devices

The diagram below shows how each category interfaces with iControl:



Routers

Router manufacturers implement proprietary protocols to enable control of their equipment. iControl's Router Service uses custom Grass Valley drivers to communicate with various routers using their native protocol. In addition to managing router control, the iControl Router Service is also able to publish router status and other information to the iControl GSM's router

plug-in. This plug-in is responsible for collecting, displaying, and updating router status in the GSM.

Some routers are also SNMP-enabled, and can send alarms to the iControl GSM. A specific SNMP driver is available for each router type.

SNMP Devices

This broad category covers any hardware or software that is able to send SNMP traps. For each supported device, an SNMP driver exists that enables some or all of the available SNMP parameters to be captured and displayed in the GSM.

In some cases, iControl interfaces to a software application that itself is used to manage a distinct set of equipment. The third party software, running on a PC or other hardware controller, usually has an SNMP agent that can be configured to send status and/or alarm messages. For each such agent, an SNMP driver exists that enables some or all of the available SNMP parameters to be captured and made available via the GSM.

Special Devices

Where particularly complex devices are to be monitored by iControl, a Special Device service exists to manage the flow of information. The status and alarm information from these devices may use SNMP, HTTP or any of a number of other protocols. Custom drivers are available for these multi-protocol devices, enabling custom GUI displays to be created within iControl.

AKCP

Table 1-1: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
" sensorProbe8 "	4.30	SNMP – AKCP sensorProbe8	IC-SNMP-138

sensorProbe8

The AKCP sensorProbe8 safeguards your infrastructure, resources and investment from external disaster before it happens. The sensorProbe8 is a high-speed, accurate and intelligent monitoring device and a completely embedded host with a proprietary Linux like OS which includes TCP/IP stack, a built in web-server and full Email and SNMP functionality.

Alpermann + Velte

Table 1-2: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
" Rubidium Universal Video Data Processor "		SNMP – Alpermann+Velte Rubidium	IC-SNMP-091

Rubidium Universal Video Data Processor

Modular multi-format video time code and metadata processor.

APC

Table 1-3: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AP7900-Series Power Distribution Unit"		SNMP – APC AP7900	IC-SNMP-095
"NetBotz 200 Environmental Monitor"	5.00	SNMP – APC NetBotz200	IC-SNMP-197
"APC SMART UPS 2200 VA"	4.30	SNMP – APC Smart-UPS 2200	IC-SNMP-158

AP7900-Series Power Distribution Unit

Standalone 19-inch rack-mountable data-line surge suppression for network, telecommunication and PC system protection.

NetBotz 200 Environmental Monitor

Over-the-network environmental monitor (humidity, temperature, door contact, dry contact, etc.).

APC SMART UPS 2200 VA

The APC Smart-UPS 2200 VA (tower or rack unit) protects critical data by supplying reliable, network-grade power in either traditional tower or rack- optimized convertible form factor.

Arris

Table 1-4: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"BMR1200 Router (formerly BigBand BMR1200)"		SNMP – BigBand BMR1200	IC-SNMP-153
"D5 Encoder"	6.03	SNMP – Arris D5	IC-SNMP-265
"EGT Dual Pass Encoders (formerly EGT Dual Pass Encoders)"	4.40	SNMP – Arris EGT Dual-Pass Encoders	IC-SNMP-194
"EGT HEMI Multi-Channel Edge Encoder (formerly EGT HEMI)"	4.40	SNMP – Arris EGT HEMI Multi-Channel Edge Encoder	IC-SNMP-193

BMR1200 Router (formerly *BigBand BMR1200*)

The Arris Broadband Multimedia-Service Router BMR1200 is a platform for network delivery of video services.

D5 Encoder



The ARRIS D5™ Universal Edge QAM (UEQ) is a unique class of IP edge network device that enables delivery of a wide variety of multimedia content in a redundant, modular, and cost-effective package. It supports a complete QAM-Sharing solution with simultaneous delivery of any combination of Video-On-Demand, Digital Broadcast, Switched Digital Video (SDV) Services, and DOCSIS downstream data using the Modular Cable Modem Termination System (M-CMTS™) architecture. Operators are saved from the capital and operational expense burden of having to replace or retrofit non-compliant Edge QAMs when transitioning to advanced multimedia services. The ARRIS D5 UEQ offers extensive, industry-leading, remote or locally-attached graphical and command line tools for operations management. All management options provide complete access control to all elements of the D5. For those operators seeking additional user-level access control, Radius and TACACS+ authentication is offered as well.

Notes

- It is not possible to perform a walk of the device using the usual way. The device will not return everything.
 - The device uses standard MIBs to contain interface and QAM information.
-

See the following tables for device support details:

- ["Health monitoring and text alarms"](#) on page 5
- ["Configurable parameters"](#) on page 5
- ["iC Web alarm parameters"](#) on page 6

Table 1-5: Health monitoring and text alarms

Alarm name	Type	Further details	URI format
Communication Status	Device	Indicates communication status with the device	{baseuri}commStatus
Device Reboot	Device	Indicates reboot status of the device.	{baseuri}powerCycle
QAM MPEG Lock ({qamport})	Service	QAM MPEG lock for a given interface number or QAM name	{baseuri}d5QamRFSigQMpegLock{qamport}
QAM Ts ID ({qamport})	Service	QAM transport stream ID tied to this QAM	{baseuri}d5vQamTransportStreamID{qamport}
QAM Error ({qamport})	Service	QAM error for a given interface number or QAM name	{baseuri}d5vQamError{qamport}
QAM Stream Status ({qamport})	Service	QAM stream status for a given interface number or QAM name	{baseuri}d5vQamStreamStatus{qamport}
TS PID Error {tsip}:{tsudp}	Service	Stream PID error	{baseuri}d5MpegMgtProgPidErrorTrap{tsudp}.{tsip}
TS Lost {tsip}:{tsudp}	Service	Stream Lost	{baseuri}d5vIpStreamLost{tsudp}.{tsip}
TS Status {tsip}:{tsudp}	Service	Stream Status	{baseuri}d5vIpStreamStatus{tsudp}.{tsip}
TS Unavail {tsip}:{tsudp}	Service	Stream Unavailable	{baseuri}d5vIpStreamUnAvail{tsudp}.{tsip}
PRG Error {tsip}:{tsudp}:{tsprg}	Service	Program Error	{baseuri}d5vIpProgramError{tsudp}.{tsip}.{tsprg}
PRG Overflow {tsip}:{tsudp}:{tsprg}	Service	Program Overflow	{baseuri}d5MpegMgtProgOverflowTrap{tsudp}.{tsip}.{tsprg}
PRG Oversubscribe {tsip}:{tsudp}:{tsprg}	Service	Program Oversubscribe	{baseuri}d5MpegMgtProgOversubsTrap{tsudp}.{tsip}.{tsprg}
PRG Underflow {tsip}:{tsudp}:{tsprg}	Service	Program Underflow	{baseuri}d5MpegMgtProgUnderflowTrap{tsudp}.{tsip}.{tsprg}

Certain parameters are configurable, as follows:

Table 1-6: Configurable parameters

Name	Parameters object key	Description/Notes	Default value
Alarm Path	alarmPath	Path under which alarms are created in IC Navigator.	"GrassValley/K2_Summit (<IP>)"
Poll Interval	pollInterval	Period between repeated SNMP polls to the device.	30 seconds
Retries	retries	Number of times to retry after a failed SNMP poll.	1 retry
Timeout	timeout	Number of seconds to wait for a response before declaring SNMP poll failed.	3 seconds

Table 1-6: Configurable parameters (*Continued*)

Name	Parameters object key	Description/Notes	Default value
Read Community	<code>readCommunity</code>	SNMP read community string (password).	"public"
adjustQAMMIBIndex	<code>adjustQAMMIBIndex</code>	The mib index is off by 1. This is a bug in the device that may be fixed in a future release. Therefore we have a way here to enable/disable that adjustment.	1
useQamName	<code>useQamName</code>	This is a method of creating an alarm using client-supplied QAM names instead of the default method of using the QAM interface. QAM names look like this: QAM 1-1.1	true
signalFocedSeverityText	<code>signalForcedSeverityText</code>	Force all signal alarms to a given severity level.	""
healthForcedSeverityText	<code>healthForcedSeverityText</code>	Force all health alarms to a given severity level.	""

The alarm parameters in iC Web are as follows:

Table 1-7: iC Web alarm parameters

Parameter	Description
<code>qamport</code>	For QAM alarms. Can be interface number or QAM name depending on parameter <code>useQamName</code> .
<code>tsudp</code>	Transport stream UDP port. Used for stream alarms.
<code>tsip</code>	Transport stream multicast ip address. Used for stream alarms.
<code>tsprg</code>	Transport stream program nubner. used for program alarms.

EGT Dual Pass Encoders (formerly *EGT Dual Pass Encoders*)

The Arris dual-pass encoders are two-pass encoders with analog and digital SDI inputs and simultaneous ASI and IP output.

EGT HEMi Multi-Channel Edge Encoder (formerly *EGT HEMi*)

The Arris EGT HEMi is a multi-channel encoder with IP-to-IP, and ASI-to-IP. It provides data on audio, video and program services, as well as a stream information.

ASC Signal Corporation

Table 1-8: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"APC400 Antenna Controller Unit"		SNMP – APC400 Antenna Controller	IC-SNMP-220

APC400 Antenna Controller Unit

The APC400 Antenna Control Unit is an antenna controller that provides basic point, maintenance, and optional tracking functions for small and medium-sized earth station antennas. The APC400 provides the user with control over basic motorization kits for earth station satellites by utilizing a simple liquid crystal display (LCD) front panel interface and powerful software protocol options. The software protocols can be manipulated through remote control.

Avid

Table 1-9: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AirSpeed5000"	5.00	SNMP – Avid Airspeed5000	IC-SNMP-221

AirSpeed5000

The AirSpeed 5000 server takes on a wide range of applications for broadcasters of any size. Building on a legacy of innovative workflow-enabling servers, AirSpeed 5000 adds cost-efficient play to air capability, slow motion playback and support for third party editing systems. Peerless Avid workflow integration, open design, and codec agility provide the ease, speed, and flexibility essential for long term broadcast success.

Axon Digital Design

The Axon frames RRS08 (version 34) and RRS18 (version 34) as well as many of Axon's family of modular interfacing and conversion cards are supported by iControl, as follows:

- **2HX10** (version 21): Dual-channel HD/SD integrity-checking probe
- **CDV29** (version 03): Analog distribution amplifier with 9 outputs and synapse reference points
- **DLA41** (version 06): 8-channel (5.1/2.0) digital audio upmixer/downmixer - with Quad Speed audio bus (based on Linear Acoustic algorithms)
- **DLA42** (version 05): 8-channel digital audio loudness control unit

- **DLA43** (version 06): 8-channel (5.1/2.0) digital audio loudness control - with Quad Speed audio bus (based on Linear Acoustic algorithms)
- **GDR26** (version 07): 3Gb/s, HD, and SD dual input distribution amplifier with 3 reclocked outputs per channel (ASI/DVB compatible)
- **HDR07** (version 04): HD/SD reclocking distribution amplifier
- **HEP10** (version 100): HD-, SD-embedded domain Dolby E-to-PCM decoder with audio shuffler (3Gb/s upgradeable)
- **HPD13** (version 100): HD-, SD-embedded domain PCM+AD to Dolby Digital (Plus) encoder with audio shuffler and audio description processor
- **HRB99** (version 080): HD/SD digital audio de-embedder, re-embedder, embedded domain shuffler with S2020 metadata insertion
- **HXT10** (versions 300, 330, 390): Dual HD input frame synchronizer, down converter, embedder, CVBS encoder
- **PBS03** (version 06): Dual channel relay-based backup switcher with signal integrity checking
- **SDN09** (version 07): SD-SDI Non-reclocking dual channel distribution amplifier (ASI/DVB compatible)
- **SDN08** (version 07): SD-SDI Non-reclocking distribution amplifier (ASI/DVB compatible)

Table 1-10: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"HXH41 HD Converter"		SNMP – Axon HXH41	IC-SNMP-147
"RRS08 — Rack Controller for SFR08"	4.30	SNMP – Axon RRS08, RRS18, PBS03, SDR08	IC-SNMP-144
"RRS18 — Rack Controller for SFR18"			
"PBS03 — Dual Channel Relay-Based Back-Up Switcher"			
"SDR08 — SD-SD Reclocking Distribution Amplifier (ASI/DVB-Compatible)"			

HXH41 HD Converter

RRS08 — Rack Controller for SFR08

RRS18 — Rack Controller for SFR18

PBS03 — Dual Channel Relay-Based Back-Up Switcher

SDR08 — SD-SD Reclocking Distribution Amplifier (ASI/DVB-Compatible)

The SDR series provide a range of distribution amplifiers with flexible input and output variations. The SDR08 reclocks the input signal. The SDR08 is a 1 to 8 distribution amplifiers compatible with ASI/DVB.

BigBand

Please see ["Arris"](#), on page 3.

Barco

Table 1-11: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Hydra Monitor Wall"	4.30	SNMP – BARCO Hydra	IC-SNMP-140

Hydra Monitor Wall

China Electronics Technology Corp.

Table 1-12: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DAL3100 2x1 Audio Switch Driver"	6.03	SNMP – CETC DAL3100	IC-SNMP-256

DAL3100 2x1 Audio Switch Driver

See the following for device support details:

- ["Alarms"](#) on page 87
- ["Configurable parameters"](#) on page 89

Table 1-13: Alarms

Alarm name	Type	Polling or Trap	MIB point	Further details
--- Main card alarms ---				
Input A Level Status	Status	Polling	<code>myCard1ALevelStatus</code>	B channel level is higher than A channel level 12dB
Input B Level Status	Status	Polling	<code>myCard1BLevelStatus</code>	B channel level is higher than A channel level 12dB
Current Channel	Status/Text	Polling	<code>myCard1CurrentChannel</code>	The Card's Current Channel
Switch Mode	Text	Polling	<code>myCard1SwitchMode</code>	The Card's switch status.
Active Alarm	Status	Polling	<code>myCard1Alarm</code>	Whether or not the card 1 has an alarms.
--- Other card alarms ---				
Level Threshold	Text	Polling	<code>myCard1LevelThreshold</code>	The Card's Level Threshold
Switch Delay	Text	Polling	<code>myCard1SwitchDelay</code>	The Card's switch delay time
Controller	Text	Polling	<code>myCard1SwitchControl</code>	The Card is Controlled by which user
Connection Status	Text	Polling	<code>myCard1ConnectStatus</code>	Whether or not DAL-3100A has found her SystemConnect
Input B 6dB Above Input A	Status	Polling	<code>myCard1BPriorA6dB</code>	B channel level is higher than A channel level 6dB
Input B 12dB Above Input A	Status	Polling	<code>myCard1BPriorA12dB</code>	B channel level is higher than A channel level 12dB
--- Non-card alarms ---				
PSU A Status	Status	Polling	<code>myPowerAStatus</code>	Whether or not Power A is normal.
PSU B Status	Status	Polling	<code>myPowerBStatus</code>	Whether or not Power B is normal.
Communication Status	Status	Polling	<code>commStatus</code>	~

Table 1-14: Configurable parameters

Parameter	Description
<code>AlarmPath</code>	Used to set the Alarm prefix. Default value: <code>PBI</code> Could be replaced by <code>IRD</code> to have legacy plug-ins tree look-like.
<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed. Default: <code>1</code>
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The <code>uniqueID</code> should be part of the URI.

Table 1-14: Configurable parameters (*Continued*)

Parameter	Description
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling. Default value: <code>public</code>
<code>writeCommunity</code>	SNMP write community string. Use to set SNMP variable. Default value: <code>private</code>
<code>nbConverter</code>	Number of converter to monitor. By default, monitor all converters (12 + 1 backup)
<code>cvSelWaitTime</code>	Defines the number of milliseconds to wait after the converter selection. Default: <code>200 ms</code>

Cisco

Table 1-15: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"D9032 MPEG-2 Encoder"		SNMP – Cisco D9032	IC-SNMP-132
"D9036 Modular Encoding Platform"	4.40	SNMP – Cisco D9036	IC-SNMP-177
"D9140 Advanced Multiplexer"	6.02	SNMP – Cisco/SA D9140	IC-SNMP-249
"D9190 Conditional Access Manager"	6.02	SNMP – Cisco/SA D9190	IC-SNMP-250
"D9228 Multiple Decryption Receiver"		SNMP – Cisco D9228	IC-SNMP-171
"D9828 Multiple Decryption Receiver"		SNMP – Cisco D9828	IC-SNMP-032
"D9850 PowerVu Program Receiver"		SNMP – Cisco D9850	IC-SNMP-024
"D9854 Receiver"		SNMP – Cisco D9854	IC-SNMP-169
"D9858 Receiver Transcoder"	6.04	SNMP – Cisco D9858	IC-SNMP-126
"DCM 9900 MPEG Processor"		SNMP – Cisco DCM9900	IC-SNMP-116
"PowerVu Network Centre"	6.02	SNMP – Cisco PowerVu Network Controller	IC-SNMP-237

D9032 MPEG-2 Encoder

D9036 Modular Encoding Platform

The D9036 is a modular encoding platform, providing multi-resolution, multi-format encoding for applications requiring high levels of video quality.

D9140 Advanced Multiplexer

Cisco's PowerVu® Model D9140 Advanced Multiplexer combines signals and encrypts data with optional standards. The PowerVu Advanced Multiplexer combines up to 24 MPEG-2 transport streams, encrypts each individual service, and provides three identical MPEG-2 transport outputs to Cisco's PowerVu Model D9390 Advanced Modulator or various other modulators for cable and terrestrial applications. Transport packets are transferred from each encoder or each transport stream receiving device to the multiplexer using a DVB-ASI interface. Communication control between the multiplexer and the PowerVu Network Centre is facilitated via an Ethernet link.

D9190 Conditional Access Manager

The Cisco® PowerVu® D9190 Conditional Access Manager (PCAM) is one of the PowerVu next generation system core components. The D9190 is used for encrypting services with PowerVu CA (PCA), and is designed for use with the Digital Content Manager to provide a functional replacement for the PowerVu D9140 Advanced Multiplexer.

D9228 Multiple Decryption Receiver

The PowerVu D9228 receives, demodulates, and decrypts multiple encrypted MPEG-2/DVB digital programs delivered via satellite or DVB-ASI interface.

D9824 Advanced Multi-Decryption Receiver

The PowerVu D9828 receives, demodulates, and decrypts multiple encrypted MPEG-2/DVB digital programs from satellite or terrestrial sources, and outputs decoded composite video and balanced audio for monitoring purposes.

D9828 Multiple Decryption Receiver

The PowerVu D9828 receives, demodulates, and decrypts multiple encrypted MPEG-2/DVB digital programs from satellite or terrestrial sources, and outputs decoded composite video and balanced audio for monitoring purposes.

D9850 PowerVu Program Receiver

The PowerVu D9850 decodes 4:2:0 video for satellite content distribution applications. It can receive digitally encrypted video, audio, utility data, and Vertical Blanking Interval (VBI) data.

D9854 Receiver

D9858 Receiver Transcoder



The Cisco®D9858 Advanced Receiver Transcoder delivers MPEG-4 high definition (HD) services to MPEG-2 cable television (CATV) headends. The Cisco D9858 extends the distribution options for MPEG-4 Advanced Video Coding (AVC) HD from MPEG-4 only environments to existing MPEG-2 networks. Support for simultaneous dual-channel decryption and transcoding provides density for locations requiring more than a single channel. The D9858 can also be used to provide a down-converted standard definition (SD) MPEG-2 program instead of one or both of the available HD transcoded programs. Video and two audio outputs are available for analog down conversion for one of the decrypted incoming MPEG-4 HD programs.

See the following tables for device support details:

- ["Alarms provided by the driver"](#) on page 13
- ["Configurable parameters"](#) on page 16

Table 1-16: Alarms provided by the driver

Alarm name	Type	Poll/ Trap	URI format	MIB node name	OID
Average Temperature	Text	Poll	saHealthMonitorBoardAvgTemp	saHealthMonitorBoardAvgTemp	.1.3.6.1.4.1.1429.2.2.6.5.38.2.3
Communication Status	Status	Poll	commStatus		
Current Temperature	Text	Poll	saHealthMonitorBoardCurrentTemp	saHealthMonitorBoardCurrentTemp	.1.3.6.1.4.1.1429.2.2.6.5.38.2.1
Device Reboot	Status	Poll	powerCycle		
Fan 1 RPM	Text	Poll	saHealthMonitorFan1RPM	saHealthMonitorFan1RPM	.1.3.6.1.4.1.1429.2.2.6.5.38.2.8
Fan 2 RPM	Text	Poll	saHealthMonitorFan2RPM	saHealthMonitorFan2RPM	.1.3.6.1.4.1.1429.2.2.6.5.38.2.9
Fan 3 RPM	Text	Poll	saHealthMonitorFan3RPM	saHealthMonitorFan3RPM	.1.3.6.1.4.1.1429.2.2.6.5.38.2.10
Fan 4 RPM	Text	Poll	saHealthMonitorFan4RPM	saHealthMonitorFan4RPM	.1.3.6.1.4.1.1429.2.2.6.5.38.2.11
Fan 5 RPM	Text	Poll	saHealthMonitorFan5RPM	saHealthMonitorFan5RPM	.1.3.6.1.4.1.1429.2.2.6.5.38.2.12

Table 1-16: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	URI format	MIB node name	OID
Fan 6 RPM	Text	Poll	saHealthMonitorFan6RPM	saHealthMonitorFan6RPM	.1.3.6.1.4.1.1429.2.2.6 .5.38.2.13
Fan 7 RPM	Text	Poll	saHealthMonitorFan7RPM	saHealthMonitorFan7RPM	.1.3.6.1.4.1.1429.2.2.6 .5.38.2.14
Max Temperature	Text	Poll	saHealthMonitorBoardMaxTemp	saHealthMonitorBoardMaxTemp	.1.3.6.1.4.1.1429.2.2.6 .5.38.2.2
Boot Version	Text	Poll	saAboutBootVer	saMacInfoTable	.1.3.6.1.4.1.1429.2.2.6 .5.4.1
Current Version	Text	Poll	saAboutCurrentVer	saMacInfoTable	.1.3.6.1.4.1.1429.2.2.6 .5.4.1
Main PCB board version	Text	Poll	saAboutBoard	saMacInfoTable	.1.3.6.1.4.1.1429.2.2.6 .5.4.1
Network Gateway	Text	Poll	saIpdataCurDefaultGateway	saIPConfigTable	.1.3.6.1.4.1.1429.2.2.6 .5.6.1.1
Network IP	Text	Poll	saIpdataCurIpAddr	saIPConfigTable	.1.3.6.1.4.1.1429.2.2.6 .5.6.1.1
Network MAC	Text	Poll	saIpdataMacAddr	saIPConfigTable	.1.3.6.1.4.1.1429.2.2.6 .5.6.1.1
Network Mask	Text	Poll	saIpdataCurNetworkMask	saIPConfigTable	.1.3.6.1.4.1.1429.2.2.6 .5.6.1.1
Product ID	Text	Poll	saAboutProductId	saMacInfoTable	.1.3.6.1.4.1.1429.2.2.6 .5.4.1
Safe Version	Text	Poll	saAboutSafeVer	saMacInfoTable	.1.3.6.1.4.1.1429.2.2.6 .5.4.1
MIRA (null) Authorized	Text	Poll	Service_null/saCaAuthorized	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
MIRA Authorized	Status	Poll	saCaAuthorized0	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
MIRA Index	Text	Poll	channelIndex0	saCaEntry	
QWER Authorized	Status	Poll	saCaAuthorized2	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
QWER Encrypted	Status	Poll	saCaEncrypted2	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
QWER Index	Text	Poll	channelIndex2	saCaEntry	
QWER Scrambled	Status	Poll	saCaScrambled2	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
ZWXC Authorized	Status	Poll	saCaAuthorized1	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1

Table 1-16: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	URI format	MIB node name	OID
ZWXC Encrypted	Status	Poll	saCaEncrypted1	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
ZWXC Index	Text	Poll	channelIndex1	saCaEntry	
ZWXC Scrambled	Status	Poll	saCaScrambled1	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
QWER (32767) Authorized	Status /Text	Poll	saCaAuthorized	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
QWER (32767) Encrypted	Status /Text	Poll	saCaEncrypted	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
QWER (32767) Scrambled	Status /Text	Poll	saCaScrambled	saCaEntry	.1.3.6.1.4.1.1429.2.2.6 .5.14.1
L-Band Input	Text	Poll	LBandInput	saSatSigLbandFreq	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.1.12
AFC Level	Text	Poll	saFeAfcLevel1	saSatSigAfc	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.1.7
ASI Lock	Status	Poll	saAsiLock	saInputStatusAsiLock	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.2.2
Audio bitrate 1	Text	Poll	saAudioBitRate1	saAudioStatusBitRate	.1.3.6.1.4.1.1429.2.2.6 .5.23.2.1.3
Audio bitrate 2	Text	Poll	saAudioBitRate2	saAudioStatusBitRate	.1.3.6.1.4.1.1429.2.2.6 .5.23.2.1.3
Corrected errors	Text	Poll	saFeCorrErrorCount		
LNB Power Supply Status	Text	Poll	saFeLnbPsStatus	saSatSigLnbPsStatus	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.1.18
RF Lock	Status	Poll	saFeRfLock	saSatSigRfLock	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.1.10
Satellite Lock	Text	Poll	saSatLock	saInputStatusSatLock	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.2.3
Transport Error	Status	Poll	saTransportError	saInputStatusTransportError	.1.3.6.1.4.1.1429.2.2.6 .5.11.1.2.9
Uncorrected errors	Text	Poll	saFeUncorrErrorCount		
Video bitrate	Text	Poll	saVideoBitrate	saVideoBitRate	.1.3.6.1.4.1.1429.2.2.6 .5.20.1.7

Certain parameters are configurable, as follows:

Table 1-17: Configurable parameters

Name	Description/Notes	Default value
<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval.	120
<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed.	1
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.	5
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.	
<code>readCommunity</code>	SNMP read community string, used for SNMP polling.	public
<code>writeCommunity</code>	SNMP write community string, used to send SNMP-set commands.	public
<code>LBandLevelThreshold</code>		-45
<code>interCommandDelay</code>		50
<code>setDelay</code>		100
<code>totalgetOIDs</code>		0

DCM 9900 MPEG Processor



The Cisco® DCM Series D9900 Digital Content Manager (DCM) MPEG Processor is a compact 2RU platform capable of processing a high number of MPEG video streams.

See the following for device support details:

- ["Alarms"](#) on page 17
- ["Configurable parameters"](#) on page 20
- ["MIBs used"](#) on page 21

Table 1-18: Alarms

Alarm name	Type	Polling or trap?	MIB point	Description
Card Not Operational	Status	Trap		Raise when the communication between the main board of the DCM and the interface card is down.
Co-processor Not Operational	Status	Trap		Raise when the communication between the interface card and the Co-Processor Card is down.
Device is in Service Mode	Status	Trap		Raise when the Ethernet capturing process is started or when the trace level for card trace logs are set to All, Minor, or Major.
Device Mode	Text	No polling, no trap, internal variable		
Device Operational Failure	Status	Trap		Raise when a "Card Not Operational" alarm is generated.
Fan Failure	Status	Trap		Raise when a fan is malfunctioning.
Heartbeat Protocol Error	Status	Trap		Raise when the UDP port used by the Heartbeat Protocol for standalone device backup is occupied.
Link Loss	Status	Trap		Raise if link is down between the source device and the DCM or between the DCM and the destination device.
Low memory	Status	Trap		Raise if less the 50 MB of the available memory is free.
NTP Offset	Status	Trap		Raise if the DCM is not synchronized with a NTP server or if the time difference between DCM and the NTP server exceeds a particular (by default 15 ms).
Operational Temperature	Status	Trap		Raise if the device temperature exceeds 65° C (149° F).
Power Up	Status	Trap		Generate after powering up or rebooting the DCM.
PS 1 Failure	Status	Trap		This alarm is generated when the power supply unit in slot PS1 is failing.
PS 2 Failure	Status	Trap		This alarm is generated when the power supply unit in slot PS2 is failing.
Requested PID could not be allocated	Status	Trap		Raise When a particular component for scrambling purposes could not be allocated
Service Level Failover Configured	Text			

Table 1-18: Alarms (Continued)

Alarm name	Type	Polling or trap?	MIB point	Description
--- Health monitoring alarms ---				
Device Communication	Status	Health Polling	/	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status	Health Polling	/	Raise a minor condition based on the value of sysUpTime read is smaller compared to last reading.
System uptime	Text	Health Polling	sysUpTime (RFC1213-MIB)	Display the uptime of the system.
--- Input > Board alarms ---				
Unreferenced PIDs Maximum Number Reached	Status	Trap		Raise when the number of incoming unreferenced components exceeds 500.
--- Input > Board > Port > IP address alarms ---				
CC Error	Status	Trap		Raise if the packets with a particular PID value were lost, or when they appeared in an incorrect order, or appeared more than twice.
FEC L/D Error	Status	Trap		Raise when a transport stream enters the device with forward error correction (FEC) scheme L x D > 100 for a GbE Interface Card or > 1500 for an IP Video Gateway Card
Input TS UDP Failover	Status	Fast and slow polling, Trap		Generated when we change of read zone (Of the current state to that of new backup state).
Input TS UDP Failover Enabled	Status	Slow polling, Trap		Show the input transport stream that it needs.
Missing FEC Stream(s)	Text/Status	Trap		Raise when one or both FEC streams are missing for the incoming transport stream.
No FEC License Available (Decoding)	Status	Trap		Generated if no license is available at the arrival of an incoming transport stream when the Default Input FEC Settings Mode is set to: 1D FEC or 2D FEC
PAT Error	Status	Trap		Raise when the PAT of the corresponding transport stream is not available within a particular time interval or contains an error.
PID Error	Status	Trap		Raise when the packet with a particular PID and referred to in the PMT is not found.
Sync Byte Error	Status	Trap		Raise when the synchronization byte in a transport stream packet is not detected.

Table 1-18: Alarms (*Continued*)

Alarm name	Type	Polling or trap?	MIB point	Description
TS Loss	Status	Trap		Raise when one of the following alarms is triggered: Link Loss, UDP Loss, Service Loss, TS Sync Loss, Sync Byte Error, UDP Stream Loss, or PAT Error.
TS Sync Loss	Status	Trap		Raise when the synchronization byte in a sequence of at least two transport stream packets are not detected.
UDP Loss	Status	Trap		Raise when the corresponding port no longer receives UDP packets.
UDP Stream Loss	Status	Trap		Raise when the transport stream, for which services are passed to the output, is no longer detected at the corresponding UDP port.
Unreferenced Pid Error	Status	Trap		Alarm is generated if the DCM receives packets with non-referenced components.
User Selected PCR PID Error	Status	Trap		Alarm generated when the "Time Base Selection" parameter is set to VBR Forced PCR or CBR Forced PCR and the defined service is missing, has no PCR PID, or has a PCR PID that doesn't arrive regularly (within 100 ms).

--- **Input > Board > Port > Service alarms** ---

Input Service Name	Text	No polling, no trap, internal variable		It is the User name of the Service Settings table. the user name will be used by the user interface to identify the service.
PMT Error	Status	Trap		Raise when the PMT for the service is not available within a particular time interval or contains errors.
Service Loss	Status	Trap		Raise when one of the following alarms is triggered: UDP Loss, UDP Stream Loss, or Missing in PAT, PMT Error, Scrambled Service, Not a Descrambled PID, Descramble a clear PID, PID Error/PID Bitrate Error.

--- **Output > Board > Port alarms** ---

DTF Bandwidth Exceeded	Status	Trap		Raise when the sum of the bandwidth of the transport streams encapsulated into a DTF transport stream exceeds the total bitrate for the DTF transport stream.
No FEC License Available (Encoding)	Status	Trap		Raise when not enough licenses are available after a reboot if the Default Input FEC Settings Mode is set to 1D FEC or 2D FEC.
Port Bandwidth Exceeded	Status	Trap		Raise when all outgoing transport streams on a particular GbE port has exceeded the maximum bandwidth for the corresponding port.

Table 1-18: Alarms (Continued)

Alarm name	Type	Polling or trap?	MIB point	Description
Stuffing Threshold Exceeded	Status	Trap		Alarm generated when the threshold is exceeded for the number of out of range packets after hitless merger of the incoming packets on a GbE port.

--- **Output > Board > Port > IP address alarms** ---

Bandwidth Exceeded	Status	Trap		The sum of the services and components within a transport stream has exceeded the bitrate that is assigned to the transport stream.
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--- **Output > Board > Service alarms** ---

Insertion Channel Active	Status	Trap		Generated when a splice event is started.
PMT section exceeds 1K	Status	Trap		This alarm occurs if the PMT section exceeds the limit to 1 K Byte.
SD/HD Mismatch	Status	Trap		Generated when a HD service of which the SD/HD parameter is set to SD then added to a rate control group or when the incoming video component is HD but SD is set for the transcoded video component.
Service in Backup (Service Loss)	Status	Trap		Alarm generated when a service is in backup state triggered by a Service Loss alarm.
Service in Backup (TS Loss)	Status	Trap		Alarm is generated when a service is in backup state triggered by a TS Loss alarm.
Service loss at output	Status	Trap		Alarm generated if the Service Loss alarm is active of the corresponding incoming service.
Service Name	Status	No polling, no trap, internal variable		It is the User name of the Service Settings table. The user name will be used by the user interface to identify the service.
Transrating problem	Status	Trap		Alarm generated when the clip used to create still picture services contains errors or when the incoming service is scrambled or when the DCM is not able to control the bitrate of the service due to poor quality of the incoming service.

Table 1-19: Configurable parameters

Parameter	Description
<code>pollInterval</code>	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.

Table 1-19: Configurable parameters (*Continued*)

Parameter	Description
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. ¹
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling.
<code>writeCommunity</code>	SNMP write community string. Use to send SNMP-set commands..
<code>udpLowPollInterval</code>	Fast poller interval in seconds on the UDP signal.
<code>udpHighPollInterval</code>	Slow poller interval in seconds on the UDP signal.

1. The unique ID should be part of the URL.

Table 1-20: MIBs used

MIB	MIB file name
RFC 1213 MIB	RFC1213-MIB.mib
SA Europe DCM MIB	SAEUROPE-DCM-MIB.mib
SA Europe Administration MIB	SAEUROPE-ADMINISTRATION-MIB.mib

PowerVu Network Centre

The PowerVu Network Centre (PNC) control system provides a complete digital video compression solution for a wide range of implementations. The PNC application offers a comprehensive solution for network management, decoder management, security, and revenue protection. It is designed to meet the analog and digital content distribution needs of programmers, broadcasters and other network operators; users who need to control multiple encoders and multiplexers in an automatically redundant system transmitting video, audio and data securely to large decoder (receiver) populations will benefit from the PNC's robust and comprehensive feature set.

See "[Alarms](#)" on page 21 for device support details:

Table 1-21: Alarms

Alarm name	Further details
<code>numberOfSignals</code>	The number of signals configured in the PNC. The current PNC supports up to 4 signals. The maximum number of signals may change in future versions of the PNC.
<code>pncAppStartTime</code>	PNC application start time: <code><year>-<month>-<day>@<hour>:<minute>:<second></code> where <code><year></code> := 4 decimal digit year <code><month></code> := 2 decimal digit month 1..12 <code><day></code> := 2 decimal digit day of month 1..31 <code><hour></code> := 2 decimal digit hour 0..23 <code><minute></code> := 2 decimal digit minute 0..59 <code><second></code> := 2 decimal digit second 0..59

Table 1-21: Alarms (Continued)

Alarm name	Further details
pncAppStatus	<p>PNC application status:</p> <ul style="list-style-type: none"> 0: Running OK 1: Not running 2: Starting up 3: Shutting down 4: Not installed
pncAppVers	<p>PNC application version:</p> <p><major version>.<minor version><patch level>{-<option list>}</p> <p>where</p> <p><major version> := decimal major version number</p> <p><minor version> := 2 digit decimal minor version number</p> <p><patch level> := [a..z]</p> <p><option list> := <option name>...</p> <p><option name> := text string name of the option</p> <p>(e.g. 4.00g-Bitmizer,Conditional_Access,Cue_Trigger,Disaster_Recovery,Dpi,MetroMux)</p>
pncPlatformStatus	<p>Result of command: prtdiag found in /usr/platform/sun4u/sbin</p> <ul style="list-style-type: none"> 0: no failures detected 1: failures detected
pncPlatformSystemDate	Result of command: /usr/bin/date
pncPlatformVers	Result of command: /usr/bin/uname -a
signalActiveSecondaryDevices	<p>A list of secondary devices that are active, and which primary devices they are recovering.</p> <p><recovery report> := <device summary><NL><device list></p> <p>where</p> <p><device summary> := <# Active>' secondaries active'</p> <p><# Active> := number of active secondaries</p> <p><device list> := <device recovery>...</p> <p><device recovery> := <secondary>' active for: '<primary></p> <p><secondary> := <device name></p> <p><primary> := <device name></p> <p>Other symbols are defined as for signalMajorAlarmDevices.</p>
signalHighlightAlarmDevices	<p>A list of devices in the signal that are reporting highlighted alarms. Up to 9 alarms may be highlighted. The list of alarms that cause an alarm to be highlighted is configurable on the server by customer service.</p> <p><report> := <device summary><NL><device list></p> <p>where</p> <p><device summary> := <# Alarms>' devices reporting highlighted alarms'</p> <p><# Alarms> := number of devices with highlighted alarms</p> <p><device> := <name>': '<alarm list><NL></p> <p><alarm list> := <alarm number>...</p> <p>Other symbols are defined as for signalMajorAlarmDevices.</p>

Table 1-21: Alarms (Continued)

Alarm name	Further details
signalMajorAlarmDevices	<p>A list of devices in the signal that are reporting major alarms.</p> <p><report> := <device summary><NL><device list></p> <p>where</p> <p><device summary> := <# Alarms>' devices reporting major alarms'</p> <p><# Alarms> := Number of devices with a major alarm</p> <p><NL> := newline</p> <p><device list> := <device>...</p> <p><device> := <device name><state><NL></p> <p><device name> := <type><signal #><role><unit #></p> <p><type> := 'MUX' 'MOD' 'AVS' 'ENC' <3 alpha chars></p> <p><signal #> := integer signal number</p> <p><role> := 'P' 'S'</p> <p><unit #> := unit # of the device</p> <p><state> := 'Fail' 'Maint'</p>
signalName	The signal name as defined in the Signal Parameters view
signalStatusTable	The signal status table is indexed using the signal number starting from 1. If an index greater than the number of signals is used, the standard SNMP end-of-table response is returned.
signalSummary	<p>A summary status for a signal indicating whether any services are being affected.</p> <ul style="list-style-type: none"> • 0: Offline All devices are offline. No online devices found. • 1: Active Service not affected with primary devices providing service. • 2: Warn Services not affected but a secondary device has been switched in to recover a service. • 3: Fail At least 1 service has been disrupted.

Communications & Power Industries

Table 1-22: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"TL22CI TWT Compact High Power Amplifier"	6.02	SNMP – CPI Amplifier TL22CI	IC-SNMP-241

TL22CI TWT Compact High Power Amplifier

TL22CI-series TWT SuperLinear® high powered amplifiers for satellite communications provide 2250 watts of peak power (1000 watts operating) in a 9RU rack footprint. The TL22CI-series amplifiers can be used, for example, in transportable and fixed-earth station applications.

Comtech EF Data Corp.

Table 1-23: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DM240XR High-Speed Digital Modulator"	6.02	SNMP – Radyne DM240	IC-SNMP-244

DM240XR High-Speed Digital Modulator



Comtech's DM240XR family of high-speed modulators support both DVB-S and DVB-S2 specifications. The DM240XR can easily be upgraded in the field. The DM240XR unit provides a comprehensive set of advanced S2 features, and extends its dominance in broadcast applications through increased data rate capability and the addition of 16APSK and 32APSK support. Proven performance operating near Shannon's limit offers results with 30% better bandwidth efficiencies and carrier to noise figures below the noise floor.

See the following for device support details:

- ["Health monitoring and text alarms"](#) on page 24
- ["Bitfield alarms"](#) on page 26
- ["Configurable parameters"](#) on page 28

Table 1-24: Health monitoring and text alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- Health monitoring alarms ---				
Device Communication	Status/health	sysUpTime (RFC1213)	Poller	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	Status/health	sysUpTime (RFC1213)	Poller	Raise a minor condition based on the value of sysUpTime read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.

Table 1-24: Health monitoring and text alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
System uptime	Text/health	<code>sysUpTime</code> (RFC1213)	Poller	System up time alarm, this is a default health monitoring alarm when you use the <code>generic.js</code> to create a new custom driver
--- Text alarms ---				
(+) 5V Monitor	Text/health	<code>radPlus5Volts</code>	Fast poller	+5V monitor with implied decimal point. For example, a value of 51 represents +5.1 Volts.
(+) 12V Monitor	Text/health	<code>radPlus12Volts</code>	Fast poller	+12V monitor with implied decimal point. For example, a value of 119 represents +11.9 Volts.
(-) 12V Monitor	Text/health	<code>radMinus12Volts</code>	Fast poller	-12V monitor with implied decimal point. For example, a value of -122 represents -12.2 Volts.
Active input of the RF Port	Text/health	<code>radRfSwitchActiveSide</code>	Fast poller	Indicates the active input of the RF switch
Active PIIC Slot	Text/health	<code>radActivePiicSlot</code>	Fast poller	Indicates the active PIIC slot
Connected Rf Switch Side	Text/health	<code>radRfSwitchConnectorSide</code>	Fast poller	Indicates the side of the RF switch to which the modulator is connected.
Current Rate Precedence	Text/health	<code>radLastRateStatus</code>	Fast poller	Shows the current rate precedence.
Ethernet Card Backup Data Activity	Status and Text / health	<code>radTerrEthActBackup</code>	Fast poller	Shows the backup data activity of the Gig Ethernet card.
Ethernet Card Backup Data Activity (C)	Text/health	<code>radTerrEthActBackupCol</code>	Fast poller	Shows the backup data activity of the Gig Ethernet card.
Ethernet Card Backup Data Activity (R)	Text/health	<code>radTerrEthActBackupRow</code>	Fast poller	Shows the backup data activity of the Gig Ethernet card.
Ethernet Card Corrected Packet Count	Text/health	<code>radTerrEthCorrPkts</code>	Fast poller	Corrected packet count for the Gig Ethernet card.
Ethernet Card Data Activity	Text/health	<code>radTerrEthActPrime</code>	Fast poller	Shows the data activity of the Gig Ethernet card.
Ethernet Card Data Activity (C)	Text/health	<code>radTerrEthActPrimeCol</code>	Fast poller	Shows the data activity of the Gig Ethernet card (column).
Ethernet Card Data Activity (R)	Text/health	<code>radTerrEthActPrimeRow</code>	Fast poller	Shows the data activity of the Gig Ethernet card (row).
Ethernet Card Fill of Jitter (%)	Text/health	<code>radTerrEthJitterFill</code>	Fast poller	Percent fill of jitter buffer for the Gig Ethernet card.

Table 1-24: Health monitoring and text alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
Ethernet Card Link Status	Text/health	radTerrEthPortStatus	Fast poller	Shows the link status of the active Gig Ethernet card.
Ethernet Card Null Packet Count	Text/health	radTerrEthNullPkts	Fast poller	Null packet count for the Gig Ethernet card.
Ethernet Card Reordered Packet Count	Text/health	radTerrEthReorPkts	Fast poller	Reordered packet count for the Gig Ethernet card.
Fault Status	Text/health	radRfSwitchDistantSideFault	Fast poller	Indicates the fault status of the modulator at the distant side of the RF switch.
Firmware Part and Revision Number	Text/health	radFirmwarePartRev	Fast poller	Provides the system firmware part and revision number.
M&C Revision Number	Text/health	radRevisionNumber	Fast poller	M&C Revision number.
Temperature	Text/health	radTemperature	Fast poller	Temperature monitor with implied decimal point. For example, a value of 490 represents 49.0 C

Table 1-25: Bitfield alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- Common alarms mask ---				
Common Alarms Mask	Text	radCommonAlarmMask	Fast poller	Common Alarm mask: A bit field. 0 = MASKED, 1 = UNMASKED
(-) 12V alarm	status		Fast poller	Bit 0
(+) 12V alarm	status		Fast poller	Bit 1
(+) 5V alarm	status		Fast poller	Bit 2
--- Common alarms status ---				
Common Alarms Status	Text	radCommonAlarmStatus	Fast poller	Common Alarm status: A bit field. 0 = PASS, 1 = FAIL
(-) 12V alarm	status		Fast poller	Bit 0
(+) 12V alarm	status		Fast poller	Bit 1
(+) 5V alarm	status		Fast poller	Bit 2
--- Major alarms mask ---				
Major Alarms Mask	Text	radMajorAlarmMask	Fast poller	Major Alarm mask: A bit field. 0 = MASKED, 1 = UNMASKED

Table 1-25: Bitfield alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
Over Sample Clock PLL Lock	status		Fast poller	Bit 1
FPGA Configuration Error	status		Fast poller	Bit 2
Synthesis ClockPL LLock	status		Fast poller	Bit 3
External Reference PL LLock	status		Fast poller	Bit 4
Composite PLL Lock	status		Fast poller	Bit 5
Symbol PLL Lock	status		Fast poller	Bit 6
Invalid Terrestrial Interface	status		Fast poller	Bit 7

--- **Major alarms status** ---

Major Alarms Status	Text	radMajorAlarmStatus	Fast poller	Major Alarm status: A bit field. 0 = PASS, 1 = FAIL
Over Sample Clock PLL Lock	status		Fast poller	Bit 1
FPGAConfigurationError	status		Fast poller	Bit 2
Synthesis ClockPL LLock	status		Fast poller	Bit 3
External Reference PL LLock	status		Fast poller	Bit 4
Composite PLL Lock	status		Fast poller	Bit 5
Symbol PLL Lock	status		Fast poller	Bit 6
Invalid Terrestrial Interface	status		Fast poller	Bit 7

--- **Minor alarms mask** ---

Minor Alarms Mask	Text	radMinorAlarmMask	Fast poller	Minor Alarm mask: A bit field. 0 = MASKED, 1 = UNMASKED
Terrestrial Ethernet Data Activity Detect	status		Fast poller	Bit 0
Terrestrial Clock Activity Detect	status		Fast poller	Bit 1
Tx Data Activity Detect	status		Fast poller	Bit 2
FIFO Overflow/Underflow Error	status		Fast poller	Bit 3
Output Level	status		Fast poller	Bit 4

Table 1-25: Bitfield alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
Loss of Frame Synchronization	status		Fast poller	Bit 5
Terrestrial Ethernet Jitter Buffer Underflow	status		Fast poller	Bit 6
Terrestrial Ethernet Jitter Buffer Overflow	status		Fast poller	Bit 7

--- **Minor alarms status** ---

Minor Alarms Status	Text	<code>radMinorAlarmStatus</code>	Fast poller	Common Alarm status: A bit field. 0 = PASS, 1 = FAIL
Terrestrial Ethernet Data Activity Detect	status		Fast poller	Bit 0
Terrestrial Clock Activity Detect	status		Fast poller	Bit 1
Tx Data Activity Detect	status		Fast poller	Bit 2
FIFO Overflow/Underflow Error	status		Fast poller	Bit 3
Output Level	status		Fast poller	Bit 4
Loss of Frame Synchronization	status		Fast poller	Bit 5
Terrestrial Ethernet Jitter Buffer Underflow	status		Fast poller	Bit 6
Terrestrial Ethernet Jitter Buffer Overflow	status		Fast poller	Bit 7

Table 1-26: Configurable parameters

Parameter	Description
<code>pollInterval</code>	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling.

Crystal Solutions

Table 1-27: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"CrystalVision 2000"		SNMP – CrystalVision 2000	IC-SNMP-021

CrystalVision 2000

Network Management and Control System for INSP integrated devices; provides a centralized monitoring capability for uplink and downlink equipment (satellite monitoring).

Dantel

Table 1-28: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"PointMaster"	5.00	SNMP – Dantel PointMaster	IC-SNMP-218
"Webmon Edge/Matrix"	5.00	SNMP – Dantel Webmon Edge / Matrix	IC-SNMP-219

PointMaster

Webmon Edge/Matrix

Davicom

Table 1-29: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Davicom MAC PLUS"		SNMP – Davicom MAC Plus	IC-SNMP-001

Davicom MAC PLUS

Standalone monitoring and control unit able to interface with virtually any type of remote site equipment and sensors.

EGT

Please see "Arris", on page 3.

Dothill

Table 1-30: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SAN Controller"	5.00	SNMP – Dothill SAN Controller	IC-SNMP-198

SAN Controller

DVB Control

Table 1-31: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DVBMonitor"			IC-SNMP-222

DVBMonitor

EMC

Table 1-32: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"NAS Network Attached Storage (formerly Isilon NAS Network Attached Storage)"	6.04	SNMP – Isilon NAS	IC-SNMP-142

NAS Network Attached Storage (formerly *Isilon NAS Network Attached Storage*)



EMC Isilon scale-out NAS storage consolidates and manages enterprise data and applications.

The EMC Isilon X-Series is a flexible scale-out platform that strikes the right balance between large capacity and high-performance storage. With SSD technology for file system metadata and file-based storage workflows, the EMC Isilon X-Series significantly accelerates namespace-intensive operations.

- ["Alarms provided by the driver"](#) on page 31
- ["Parameters"](#) on page 38

Table 1-33: Alarms provided by the driver

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
--- Cluster: CPU ---					
CPU Idle Pct	Text	Poll	Cluster/CPU/clusterCPUIdlePct	clusterCPUIdlePct	.1.3.6.1.4.1.12124.1.2.3.5
CPU Interrupt	Text	Poll	Cluster/CPU/clusterCPUInterrupt	clusterCPUInterrupt	.1.3.6.1.4.1.12124.1.2.3.4
CPU Nice	Text	Poll	Cluster/CPU/clusterCPUNice	clusterCPUNice	.1.3.6.1.4.1.12124.1.2.3.2
CPU System	Text	Poll	Cluster/CPU/clusterCPUSystem	clusterCPUSystem	.1.3.6.1.4.1.12124.1.2.3.3
CPU User	Text	Poll	Cluster/CPU/clusterCPUUser	clusterCPUUser	.1.3.6.1.4.1.12124.1.2.3.1
--- Cluster: File system ---					
Access Time Enabled	Text	Poll	Cluster/File_System/accessTimeEnabled	accessTimeEnabled	.1.3.6.1.4.1.12124.1.3.10
Access Time Grace	Text	Poll	Cluster/File_System/accessTimeGracePeriod	accessTimeGracePeriod	.1.3.6.1.4.1.12124.1.3.11
--- Cluster: License: 1 ---					
License Expiration Date	Text	Poll	Cluster/License/1/licenseExpirationDate	licenseTable	.1.3.6.1.4.1.12124.1.5.1.1.5
License Module Name	Text	Poll	Cluster/License/1/licenseModuleName	licenseTable	.1.3.6.1.4.1.12124.1.5.1.1.2
License Status Text	Text	Poll	Cluster/License/1/licenseStatusText	licenseTable	.1.3.6.1.4.1.12124.1.5.1.1.3
--- Cluster: License: 2 ---					
License Expiration Date	Text	Poll	Cluster/License/2/licenseExpirationDate	licenseTable	.1.3.6.1.4.1.12124.1.5.1.1.5

Table 1-33: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
License Module Name	Text	Poll	Cluster/License/2/licenseModuleName	licenseTable	.1.3.6.1.4.1.12124.1.5.1.1.2
License Status Text	Text	Poll	Cluster/License/2/licenseStatusText	licenseTable	.1.3.6.1.4.1.12124.1.5.1.1.3
--- Cluster: Snapshot ---					
Reserved Pct	Text	Poll	Cluster/Snapshot/snapshotReservedPct	snapshotReservedPct	.1.3.6.1.4.1.12124.1.13.1.3
Root Access CIFS	Text	Poll	Cluster/Snapshot/snapshotRootAccessCIFS	snapshotRootAccessCIFS	.1.3.6.1.4.1.12124.1.13.1.8
Root Access Local	Text	Poll	Cluster/Snapshot/snapshotRootAccessLocal	snapshotRootAccessLocal	.1.3.6.1.4.1.12124.1.13.1.11
Root Access NFS	Text	Poll	Cluster/Snapshot/snapshotRootAccessNFS	snapshotRootAccessNFS	.1.3.6.1.4.1.12124.1.13.1.5
Root Visibility CIFS	Text	Poll	Cluster/Snapshot/snapshotRootVisibilityCIFS	snapshotRootVisibilityCIFS	.1.3.6.1.4.1.12124.1.13.1.7
Root Visibility local	Text	Poll	Cluster/Snapshot/snapshotRootVisibilityLocal	snapshotRootVisibilityLocal	.1.3.6.1.4.1.12124.1.13.1.10
Root Visibility NFS	Text	Poll	Cluster/Snapshot/snapshotRootVisibilityNFS	snapshotRootVisibilityNFS	.1.3.6.1.4.1.12124.1.13.1.4
Schedule Create Enabled	Text	Poll	Cluster/Snapshot/snapshotScheduledCreateEnabled	snapshotScheduledCreateEnabled	.1.3.6.1.4.1.12124.1.13.1.1
Schedule Delete Enabled	Text	Poll	Cluster/Snapshot/snapshotScheduledDeleteEnabled	snapshotScheduledDeleteEnabled	.1.3.6.1.4.1.12124.1.13.1.2
Subdir Access CIFS	Text	Poll	Cluster/Snapshot/snapshotSubdirAccessCIFS	snapshotSubdirAccessCIFS	.1.3.6.1.4.1.12124.1.13.1.9
Subdir Access Local	Text	Poll	Cluster/Snapshot/snapshotSubdirAccessLocal	snapshotSubdirAccessLocal	.1.3.6.1.4.1.12124.1.13.1.12
Subdir Access NFS	Text	Poll	Cluster/Snapshot/snapshotSubdirAccessNFS	snapshotSubdirAccessNFS	.1.3.6.1.4.1.12124.1.13.1.6
--- Health monitoring ---					
Device Communication	Status	Poll	deviceCommAlarm		
Device Restart	Status	Poll	deviceRestartAlarm		

Table 1-33: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
System Uptime	Text	Poll	sysUpTime	sysUpTime	.1.3.6.1.2.1.1.3
--- Node: Chassis: 1 ---					
Chassis Config Number	Text	Poll	Node/Chassis/1/chassisConfigNumber	chassisTable	.1.3.6.1.4.1.12124.2.51.1.2
Chassis Led	Status	Poll	Node/Chassis/1/chassisUnitIDLEDO n	chassisTable	.1.3.6.1.4.1.12124.2.51.1.5
Chassis Number	Text	Poll	Node/Chassis/1/chassisNumber	chassisTable	.1.3.6.1.4.1.12124.2.51.1.1
Model	Text	Poll	Node/Chassis/1/chassisModel	chassisTable	.1.3.6.1.4.1.12124.2.51.1.4
Serial Number	Text	Poll	Node/Chassis/1/chassisSerialNumber	chassisTable	.1.3.6.1.4.1.12124.2.51.1.3
--- Node: Chassis: 2 ---					
Chassis Config Number	Text	Poll	Node/Chassis/2/chassisConfigNumber	chassisTable	.1.3.6.1.4.1.12124.2.51.1.2
Chassis Led	Status	Poll	Node/Chassis/2/chassisUnitIDLEDO n	chassisTable	.1.3.6.1.4.1.12124.2.51.1.5
Chassis Number	Text	Poll	Node/Chassis/2/chassisNumber	chassisTable	.1.3.6.1.4.1.12124.2.51.1.1
Model	Text	Poll	Node/Chassis/2/chassisModel	chassisTable	.1.3.6.1.4.1.12124.2.51.1.4
Serial Number	Text	Poll	Node/Chassis/2/chassisSerialNumber	chassisTable	.1.3.6.1.4.1.12124.2.51.1.3
--- Node: CPU: 1 ---					
CPU Idle	Text	Poll	Node/CPU/1/nodePerCPUIdle	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.5
CPU Interrupt	Text	Poll	Node/CPU/1/nodePerCPUInterrupt	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.4
CPU Nice	Text	Poll	Node/CPU/1/nodePerCPUNice	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.2
CPU System	Text	Poll	Node/CPU/1/nodePerCPUSystem	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.3
CPU User	Text	Poll	Node/CPU/1/nodePerCPUUser	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.1

Table 1-33: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
--- Node: CPU: 2 ---					
CPU Idle	Text	Poll	Node/CPU/2/nodePerCPUIdle	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.5
CPU Interrupt	Text	Poll	Node/CPU/2/nodePerCPUInterrupt	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.4
CPU Nice	Text	Poll	Node/CPU/2/nodePerCPUNice	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.2
CPU System	Text	Poll	Node/CPU/2/nodePerCPUSystem	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.3
CPU User	Text	Poll	Node/CPU/2/nodePerCPUUser	nodeCPUPerfTable	.1.3.6.1.4.1.12124.2.2.3.10.1.1
--- Node: CPU ---					
Avg CPU Idle	Text	Poll	Node/CPU/nodeCPUIdle	nodeCPUIdle	.1.3.6.1.4.1.12124.2.2.3.10.1.5
Avg CPU Interrupt	Text	Poll	Node/CPU/nodeCPUInterrupt	nodeCPUInterrupt	.1.3.6.1.4.1.12124.2.2.3.10.1.4
Avg CPU Nice	Text	Poll	Node/CPU/nodeCPUNice	nodeCPUNice	.1.3.6.1.4.1.12124.2.2.3.10.1.2
Avg CPU System	Text	Poll	Node/CPU/nodeCPUSystem	nodeCPUSystem	.1.3.6.1.4.1.12124.2.2.3.10.1.3
Avg CPU User	Text	Poll	Node/CPU/nodeCPUUser	nodeCPUUser	.1.3.6.1.4.1.12124.2.2.3.10.1.1
--- Node: Disk: 1 ---					
Disk Bay	Text	Poll	Node/Disk/1/diskBay	diskTable	.1.3.6.1.4.1.12124.2.52.1.1
Disk Chassis Number	Text	Poll	Node/Disk/1/diskChassisNumber	diskTable	.1.3.6.1.4.1.12124.2.52.1.3
Disk Logical Number	Text	Poll	Node/Disk/1/diskLogicalNumber	diskTable	.1.3.6.1.4.1.12124.2.52.1.2
Disk Model	Text	Poll	Node/Disk/1/diskModel	diskTable	.1.3.6.1.4.1.12124.2.52.1.6
Disk Name	Text	Poll	Node/Disk/1/diskDeviceName	diskTable	.1.3.6.1.4.1.12124.2.52.1.4
Disk Status	Text	Poll	Node/Disk/1/diskStatus	diskTable	.1.3.6.1.4.1.12124.2.52.1.5
Firmware Version	Text	Poll	Node/Disk/1/diskFirmwareVersion	diskTable	.1.3.6.1.4.1.12124.2.52.1.8

Table 1-33: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
Serial Number	Text	Poll	Node/Disk/1/diskSerialNumber	diskTable	.1.3.6.1.4.1.12124.2.52.1.7
--- Node: Disk: 2 ---					
Disk Bay	Text	Poll	Node/Disk/2/diskBay	diskTable	.1.3.6.1.4.1.12124.2.52.1.1
Disk Chassis Number	Text	Poll	Node/Disk/2/diskChassisNumber	diskTable	.1.3.6.1.4.1.12124.2.52.1.3
Disk Logical Number	Text	Poll	Node/Disk/2/diskLogicalNumber	diskTable	.1.3.6.1.4.1.12124.2.52.1.2
Disk Model	Text	Poll	Node/Disk/2/diskModel	diskTable	.1.3.6.1.4.1.12124.2.52.1.6
Disk Name	Text	Poll	Node/Disk/2/diskDeviceName	diskTable	.1.3.6.1.4.1.12124.2.52.1.4
Disk Status	Text	Poll	Node/Disk/2/diskStatus	diskTable	.1.3.6.1.4.1.12124.2.52.1.5
Firmware Version	Text	Poll	Node/Disk/2/diskFirmwareVersion	diskTable	.1.3.6.1.4.1.12124.2.52.1.8
Serial Number	Text	Poll	Node/Disk/2/diskSerialNumber	diskTable	.1.3.6.1.4.1.12124.2.52.1.7
--- Node: Disk Perf: 1 ---					
Disk Bay	Text	Poll	Node/Disk_Perf/1/diskPerfBay	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.1
Disk Input Rate	Text	Poll	Node/Disk_Perf/1/diskPerfInBitsPerSecond	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.4
Disk Name	Text	Poll	Node/Disk_Perf/1/diskPerfDeviceName	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.2
Disk Ops per sec	Text	Poll	Node/Disk_Perf/1/diskPerfOpsPerSecond	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.3
Disk Output Rate	Text	Poll	Node/Disk_Perf/1/diskPerfOutBytesPerSecond	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.5
--- Node: Disk Perf: 2 ---					
Disk Bay	Text	Poll	Node/Disk_Perf/2/diskPerfBay	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.1
Disk Input Rate	Text	Poll	Node/Disk_Perf/2/diskPerfInBitsPerSecond	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.4
Disk Name	Text	Poll	Node/Disk_Perf/2/diskPerfDeviceName	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.2

Table 1-33: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
Disk Ops per sec	Text	Poll	Node/Disk_Perf/2/diskPerfOpsPerSecond	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.3
Disk Output Rate	Text	Poll	Node/Disk_Perf/2/diskPerfOutBytesPerSecond	diskPerfTable	.1.3.6.1.4.1.12124.2.2.52.1.5
--- Node: Fans: 1 ---					
Description	Text	Poll	Node/Fans/1/fanDescription	fanTable	.1.3.6.1.4.1.12124.2.53.1.3
Fan Number	Text	Poll	Node/Fans/1/fanNumber	fanTable	.1.3.6.1.4.1.12124.2.53.1.1
Name	Text	Poll	Node/Fans/1/fanName	fanTable	.1.3.6.1.4.1.12124.2.53.1.2
Speed	Text	Poll	Node/Fans/1/fanSpeed	fanTable	.1.3.6.1.4.1.12124.2.53.1.4
--- Node: Fans: 2 ---					
Description	Text	Poll	Node/Fans/2/fanDescription	fanTable	.1.3.6.1.4.1.12124.2.53.1.3
Fan Number	Text	Poll	Node/Fans/2/fanNumber	fanTable	.1.3.6.1.4.1.12124.2.53.1.1
Name	Text	Poll	Node/Fans/2/fanName	fanTable	.1.3.6.1.4.1.12124.2.53.1.2
Speed	Text	Poll	Node/Fans/2/fanSpeed	fanTable	.1.3.6.1.4.1.12124.2.53.1.4
--- Node: Status ---					
Node Health	Status	Poll	Node/Status/nodeHealth	nodeHealth	.1.3.6.1.4.1.12124.2.1.2
Node Name	Text	Poll	Node/Status/nodeName	nodeName	.1.3.6.1.4.1.12124.2.1.1
Node Type	Text	Poll	Node/Status/nodeType	nodeType	.1.3.6.1.4.1.12124.2.1.3
Read Only	Text	Poll	Node/Status/readOnly	readOnly	.1.3.6.1.4.1.12124.2.1.4
--- Node: Temperature: 1 ---					
Description	Text	Poll	Node/Temperature/1/tempSensorDescription	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.3
Name	Text	Poll	Node/Temperature/1/tempSensorName	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.2

Table 1-33: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
Sensor	Text	Poll	Node/Temperature/1/tempSensorNumber	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.1
Value	Text	Poll	Node/Temperature/1/tempSensorValue	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.4

--- **Node: Temperature: 2** ---

Description	Text	Poll	Node/Temperature/2/tempSensorDescription	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.3
Name	Text	Poll	Node/Temperature/2/tempSensorName	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.2
Sensor	Text	Poll	Node/Temperature/2/tempSensorNumber	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.1
Value	Text	Poll	Node/Temperature/2/tempSensorValue	tempSensorTable	.1.3.6.1.4.1.12124.2.54.1.4

--- **Node: Voltage: 1** ---

Description	Text	Poll	Node/Voltage/1/powerSensorDescription	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.3
Name	Text	Poll	Node/Voltage/1/powerSensorName	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.2
Sensor Number	Text	Poll	Node/Voltage/1/powerSensorNumber	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.1
Value	Text	Poll	Node/Voltage/1/powerSensorValue	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.4

--- **Node: Voltage: 2** ---

Description	Text	Poll	Node/Voltage/2/powerSensorDescription	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.3
Name	Text	Poll	Node/Voltage/2/powerSensorName	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.2
Sensor Number	Text	Poll	Node/Voltage/2/powerSensorNumber	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.1
Value	Text	Poll	Node/Voltage/2/powerSensorValue	powerSensorTable	.1.3.6.1.4.1.12124.2.55.1.4

Certain parameters can be passed to the driver, as follows:

Table 1-34: Parameters

Name	Description/Notes	Default value	Configurable in GUI
pollInterval	Poller interval in seconds. Overwrite the default interval.	5	NO
retries	If an SNMP request times out, this defines the number of retries to be performed.	2	NO
timeout	Delay in seconds before declaring a timeout in the current SNMP request.	5	NO
uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.		NO
readCommunity	SNMP read community string, used for SNMP polling.	Public	NO
writeCommunity	SNMP write community string, used to send SNMP-set commands.		NO

Ensemble Designs

Table 1-35: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Avenue Modular Interfaces"		SNMP – Ensemble Design Avenue	IC-SNMP-087

Avenue Modular Interfaces

Modular video and audio interfaces; expandable, modular tray based signal integration system. Provides signal processing, infrastructure and control.

Envivio

Table 1-36: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"4Caster C4 Encoder"		SNMP – Envivio 4Caster C4	IC-SNMP-133
"4Manager"	5.00	SNMP – Envivio 4Manager	IC-SNMP-217

4Caster C4 Encoder

Envivio 4Caster C4 is an encoding/transcoding appliance.

4Manager

Ericsson

Table 1-37: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"nCompass Control"		SNMP – Ericsson/Tandberg nCompass	IC-SNMP-081
"RX1290 Multi-Format SD/HD IRD"		SNMP – Ericsson/Tandberg RX1290	IC-SNMP-121
"RX8200-Series Advanced Modular Receiver"	4.30	SNMP – Ericsson/Tandberg RX8200	IC-SNMP-151
"TT1260 Integrated Receiver Decoder"		SNMP – Ericsson TT1260	IC-SNMP-005
"TT4130 Transport Stream Analyzer"		SNMP – Ericsson TT4130	IC-SNMP-122
"Ericsson iPlex (formerly SkyStream iPlex)"		SNMP – Ericsson/Tandberg iPlex	IC-SNMP-172
"Ericsson MediaPlex (formerly SkyStream MediaPlex)"		SNMP – Ericsson/Tandberg MediaPlex	IC-SNMP-173
--- Frames ---			
"Ericsson/ETV VPC Frame"	6.03	SNMP – ETV frame	IC-SNMP-259
--- Frame modules ---			
"ETV Module—CE Host Controller Card"	6.03	SNMP – ETV CE Host Controller Card	IC-SNMP-260
"ETV Module—CE-x H20 Encoder Card"	6.03	SNMP – ETV CE-x H20 Encoder Card	IC-SNMP-261
"ETV Module—CE-x H20 Pre-Processor Card"	6.03	SNMP – ETV CE-x H20 Preprocessor Card	IC-SNMP-262

Ericsson/ETV VPC Frame

See the following for device support details:

- ["Ericsson Frame alarms"](#) on page 39
- ["Configurable parameters"](#) on page 40
- ["MIBs used"](#) on page 40

Table 1-38: Ericsson Frame alarms

Alarm name	Type	Polling or trap?	Description	URI format	MIB name
Communication Status					
Device Reboot					
Trap Destination					

Table 1-39: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm path	alarmPath	Set the alarm path in iC Navigator.	ERICSSON_FRAME/ERICSSON_FRAME (" + host + ");
Poll interval	pollInterval	Poller interval in seconds.	20
Retries	retries	If an SNMP request timeout, this defines the number of retries to be performed.	1
Timeout	timeout	Delay in seconds before declaring a timeout in the current SNMP request.	5
Unique identifier	uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.	
Read community	readCommunity	The SNMP poller read community.	"public"
Write community	writeCommunity	The SNMP poller write community.	"public"

Table 1-40: MIBs used

MIB	MIB file name
ETV Configuration MIB ¹	ETV-CONFIGURATION-MIB.mib
ETV Alarm trap MIB	ETV-ALARMTRAP-MIB.mib

1. If the revision for *ETV-Configuration-MIB* is not correct, you may experience frame alarms and card failure. The underlying reason for failures in such cases, is that the Frame plugin cannot retrieve the card name. The *board type* string—and **not** the *board type id* number used in older revisions—is required.

nCompass Control

nCompass Control offers service providers a means to manage Ericsson's full range of video headend systems and broadcast products.

RX1290 Multi-Format SD/HD IRD



The RX1290 is a multi-format SD/HD integrated receiver/decoder, capable of decoding all video formats. The RX1290 is compatible with MPEG-2, MPEG-4 AVC, SD, and HD and can decode both 4:2:0 and 4:2:2 video.

RX8200-Series Advanced Modular Receiver

The RX8200 Advanced Modular Receiver decodes video and offers connectivity for a wide range of transmission media.

TT1260 Integrated Receiver Decoder

The TT1260 is a professional grade IRD able to decode MPEG-2 SD 4:2:2 video. The TT1260 has dual SDI output, dual analog BNC outputs, remote control via SNMP or Web page, and CAM menu browsing via Web browser.

TT4130 Transport Stream Analyzer

The TT4130 Transport Stream Analyzer combines advanced error detection and monitoring via a Web interface in a 3RU multi-channel unit for MPEG-2 and MPEG-4 AVC transport streams.

The TT4130 offers a compact multi-channel transport stream analyzer with a wide range of input interface options making it suitable for use in a range of markets: cable, satellite, terrestrial, mobile, distribution and contribution.

Ericsson iPlex (*formerly SkyStream iPlex*)

The iPlex is a high density, multi-functional video processing platform designed for telco, cable and satellite operators delivering IPTV over DSL infrastructure.

Ericsson MediaPlex (*formerly SkyStream MediaPlex*)

The Mediaplex-20 video processing platform is a multi-function, carrier-grade IPTV headend.

ETV Module—CE Host Controller Card

See the following for device support details:

- ["ETV module—CE host controller card alarms"](#) on page 41

Table 1-41: ETV module—CE host controller card alarms

Alarm name	Type	Polling or trap?	Description	URI format	MIB name
+12V A Failed					
+12V B Failed					
Fan Failure					
Internal Hardware Issue					
Option Card Comms Failure in slot					
Option card failed to boot					

Table 1-41: ETV module—CE host controller card alarms (*Continued*)

Alarm name	Type	Polling or trap?	Description	URI format	MIB name
Over Temperature					
Over Temperature Warning					
Power On Self Test Failure					
System Clock Not Locked					

ETV Module—CE-x H20 Encoder Card

The Ericsson CE-x Series encoder modules support MPEG-4 AVC Fidelity Range Extensions (FRExt), enabling broadcasters and operators to capture, archive and distribute content in high-quality HDTV.

See the following for device support details:

- ["Alarms"](#) on page 42
- ["Configurable parameters"](#) on page 43
- ["MIBs used"](#) on page 43

Table 1-42: Alarms

Alarm name	Type	Polling or trap?	MIB point	Code to raise alarm	Description
Licensed					
--- Health Monitoring ---					
Over Temperature					
Over Temperature Warning					
Power On Self Test Failure					
SMPTE334 Closed Captions Input Lock					
Video/Audio Module Error					
Video Processor Boot Failure					

Table 1-42: Alarms (*Continued*)

Alarm name	Type	Polling or trap?	MIB point	Code to raise alarm	Description
--- Signal ---					
Audio Input Lock					
Audio n silence					
Audio Module Error					
Video Input Lock					

Table 1-43: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm Path	<code>alarmPath</code>	Path under which alarms are created in IC Nav	"GrassValley/K2_Summit(<IP>)"
Poll Interval	<code>pollInterval</code>	Period between repeated SNMP polls to the device	30 seconds
Retries	<code>retries</code>	Number of times to retry after a failed SNMP poll	1 retry
Timeout	<code>timeout</code>	Number of seconds to wait for a response before declaring SNMP poll failed	3 seconds
Unique ID	<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.	
Read Community	<code>readCommunity</code>	SNMP read community string (password)	"public"
Write Community	<code>writeCommunity</code>	SNMP write community string (password)	"public"

Table 1-44: MIBs used

MIB	MIB file name
ETV-Configuration-MIB	ETV-CONFIGURATION-MIB.mib
ETV-AlarmTrap-MIB	ETV-ALARMTRAP-MIB.mib

Evertz

Table 1-45: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"500-Series Frame"	4.03	SNMP – Evertz 500	IC-SNMP-128
"500FC, 500DA"		SNMP – Evertz 500 (FC + DA)	IC-SNMP-129
"FC3405 Frame Controllers and Power Converters"	6.02	SNMP – Evertz 3000	IC-SNMP-130
"5600 ACO2 Automatic Changeover"	4.30	SNMP – Evertz MSC5600 ACO2	IC-SNMP-136
"5600MSC Master Sync and Clock Generator"	4.30	SNMP – Evertz MSC5600	IC-SNMP-189
"7867VIPa-DUO"	6.02	SNMP – Evertz 7867VIPa-DUO	IC-SNMP-235
"7700-Series Frame"		SNMP – Evertz 7700	IC-SNMP-042
"Keyer"	5.00	SNMP – Evertz Keyer	IC-SNMP-212
"Xenon Routing Switcher"		SNMP – Evertz Xenon	IC-SNMP-090

500-Series Frame

The Evertz 500FR Compact Distribution Frame is a 3RU front-loading frame designed to house up to 16 single slot modules.

500FC, 500DA

The 500FC VistaLINK® Frame Controller card enables communication with VistaLINK® 500-series modules via a 10/100BASE-TX Ethernet port. The 500FC handles all SNMP communications between a frame and a network management system, and serves as a gateway to individual cards in the frame.

FC3405 Frame Controllers and Power Converters



Evertz® 3405FR-XLINK frame

The Evertz® 3405FC frame controller is the control interface for the family of rack-mounted Evertz SFP frames that include the 3405FR-BNC, 3405FR-DIN, and 3405FR-XLINK frames.

See the following for device support details:

- ["Health monitoring alarms"](#) on page 45
- ["Configurable parameters"](#) on page 47

Table 1-46: Health monitoring alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- Health monitoring alarms ---				
Device Communication	status/health	<code>sysUpTime</code> (RFC1213)	Polling	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	status/health	<code>sysUpTime</code> (RFC1213)	Polling	Raise a minor condition based on the value of <code>sysUpTime</code> read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	status/health	<code>sysUpTime</code> (RFC1213)	Polling	System up time alarm, this is a default health monitoring alarm when you use the <code>generic.js</code> to create a new custom driver
--- Monitor alarms ---				
<i>The device has sixteen SFP ports. The information on alarms will be displayed for each valid SFP on the device.</i>				
Version	Text		Polling	Version number for the SFP module

Table 1-46: Health monitoring alarms (Continued)

Alarm name	Type	MIB point	Polling or trap?	Further details
Upgrade Support	Status		Polling	Indicates whether the SFP firmware can be upgraded using the second stage bootloader
Serial number	Text		Polling	Serial number for SFP module
Id	Text		Polling	Describe the specific type of SFP
Class	Text	FC3405-MIB	Polling	Describe the base class of SFPs

--- **TX alarms** ---

TX data are on two cannons Laser A and Laser B, the information displayed is done for both tables of index: laserA (1), laserB (2)

txBiasCurrent	Text	FC3405-MIB	Polling and trap	Displays bias current on laser in units of 0.01 mA
txLaserEn	Text		Polling and trap	Tells about SFPTX laser status
txLaserStatus	Text		Polling and trap	Tells about wavelength supported by SFPTX's lasers
txReclock	Text		polling and trap	displays the reclocker status
txWavelength	Text		polling and trap	tells about SFP TX laser status

--- **RX alarms** ---

RX data are on two cannons Laser A and Laser B, the information displayed is done for both. table of indexes : laserA (1), laserB (2)

rxLaserPowr	Text	FC3405-MIB	polling and trap	tells about SFP RX received power status
rxReclock	Text		polling and trap	displays the reclocker status

--- **Notify alarms** ---

This status are displayed for each index of this table.

Table of indexes : txCarrier1 (1), txCarrier2 (2), rxLoss1 (3), rxLoss2 (4), rxOptPwrHigh1 (5), rxOptPwrHigh2 (6), rxOptPwrLow1 (7), rxOptPwrLow2 (8), noInputDetected1 (9), noInputDetected2 (10), reclockerLoss1 (11), reclockerLoss2 (12), txLaserFault1 (13), txLaserFault2 (14), sfpCommunicationLoss (15)

mgmtFaultPresent	Status		polling and trap	Check the status of fault(s)
SendMgmtTrap	Status	FC3405-MIB	polling and trap	Used to Turn Traps On and Off
trapValid	Status		polling and trap	Indicate if a particular trap is applicable to current SFP instance

Table 1-46: Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
------------	------	-----------	------------------	-----------------

--- **Coax alarms** ---

All the following are elements related to signal output with type ASI.

Coax signals are on two cannons Channel A and Channel B, the information displayed is done for both.

Tables of index : ChannelA (1), ChannelB (2)

SignalRate	Text		polling and trap	Indicates the signal rate detected by the reclocker
SignalPresence	Status	FC3405-MIB	polling and trap	Indicates the signal presence on the indexed channel
SignalLock	Status		polling and trap	Indicates the status of the signal lock of the reclocker
CableEqualization	Text		polling and trap	Indicates the percentage of cable equalization of the indexed channel

Table 1-47: Configurable parameters

Parameter	Description
pollInterval	Fast poller interval in seconds.
retries	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
timeout	Delay in seconds before declaring a timeout in the current SNMP request.
uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of URI.
readCommunity	SNMP read community string. Use for SNMP polling.

5600 ACO2 Automatic Changeover

5600MSC Master Sync and Clock Generator

7867VIPA-DUO

The 7867VIP Advanced is a multi-image display processor.

7700-Series Frame

The Evertz 7700-Series frame enables video and audio processing and distribution of HDTV, SDTV and analog signals.

Keyer

Xenon Routing Switcher

Multi-format video routing switchers

EVS

Table 1-48: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"XT/XS-Series Video Servers"		SNMP – EVS X-Series	IC-SNMP-185

XT/XS-Series Video Servers

XT- and XS-series video servers are production servers designed with advanced security features such as RAID technology, redundant and hot-swappable power supplies to guarantee no operational failures during production.

Global Caché

GC-100 Network Adapter

The GC-100 Network Adapter connects a network utilizing TCP/IP to infrared (IR), serial, relay and sensor inputs that can interrupt or be polled by another network device.

Grass Valley

Table 1-49: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"iTx HP DL370 G6 Server"		SNMP – Miranda iTX HP DL Series	
"Kaleido-Alto/Quad"		Kaleido-Alto	
"Kaleido-K2"		Kaleido-K2	
"Kaleido-K2 Edge"	6.03	SNMP – Grass Valley K2 Edge for firmware 4.1	
		SNMP – Grass Valley K2 Edge for firmware 4.2	
"Kaleido-K2 Solo Media Server"	6.03	SNMP – Grass Valley K2 Media Server	
"Kaleido-K2 Summit Production Client"	6.03	SNMP – Grass Valley K2 Summit Production Client	

Table 1-49: Ordering information (*Continued*)

Hardware	New in iControl version	GSM plug-in name	Order number
"Kaleido-X"		Kaleido-X	
"NVision NV9000 System Controller"		SNMP – nVision NV9000	
"Trinix"		SNMP – Grass Valley Trinix	IC-SNMP-092
"Vertigo XG"	4.40	SNMP – Miranda Vertigo XG (Supermicro)	
"vFlex Multi-purpose HD Video Data Inserter (formerly mfg'd by Softel)"	6.02	SNMP – Softel vflex	IC-SNMP-254

iTx HP DL370 G6 Server

Server for iTx's IT-based playout of linear and on-demand television.

Kaleido-Alto/Quad

High-resolution Kaleido-Alto/Quad multi-image display processors.

Kaleido-K2

High-resolution Kaleido-K2: multi-image display processor.

Kaleido-K2 Edge



K2 Edge is a robust and proven Linux-based, software-centric, multi-platform playout system with a purpose-built, high availability architecture for mission-critical 24/7 playout applications.

There are currently two versions of the driver:

- version—named `GrassValley_K2_Edge_v1.js`—which was originally built (under a different name) to service the legacy K2 Edge using firmware version 4.1, and
- a newer version—named `GrassValley_K2_Edge_v2.js`—which has most recently been reviewed by Grass Valley and which uses firmware version 4.2

Note: The differences between GrassValley_K2_Edge_v1.js and GrassValley_K2_Edge_v2.js are as follows:

- All OIDs are different, starting by the enterprise code changed.
- Driver v1 has memory alarms that v2 does not have.
- Driver v2 has PSU1 and PSU2 alarms that v1 does not have.
- Hard Disk Smart Status and Hard Disk Status text is different in GSM alarm.
- Number of fans and hard drives are different.

See the following for device support details:

- ["K2 Edge alarms \(driver GrassValley_K2_Edge_v1.js\)"](#) on page 50
- ["K2 Edge alarms \(driver GrassValley_K2_Edge_v2.js\)"](#) on page 51
- ["Configurable parameters"](#) on page 53
- ["Alarm parameters in iC Web"](#) on page 53
- ["MIBs used"](#) on page 53

Table 1-50: K2 Edge alarms (driver GrassValley_K2_Edge_v1.js)

Alarm name	Type	Polling or trap?	Description	URI format	MIB name
Communication Status	Status	Indicates communication status with the device		{baseuri}commStatus	
Power	Status	Indicates reboot status of the device		{baseuri}powerCycle	
Fan RPM (1 per Fan)	Both	Total amount of memory available		{baseuri}hrMemorySize	
Hard Disk Smart Status (1 per HD)	Both	Model of the device		{baseuri}gvgElModel	
Hard Disk Status (1 per HD)	Both	Operational state of the device		{baseuri}gvgElState	
Hard Disk Temp (1 per HD)	Both	Software revision of the firmware on the device		{baseuri}gvgElSoftwareRev	
Load 1 Min.	Both	Informative string pertaining the logical disk		{baseuri}LogicalDisk{diskId}/hrStorageDescr	
Load 5 Min.	Both	Total space available on the logical disk (bytes)		{baseuri}LogicalDisk{diskId}/hrStorageSize	

Table 1-50: K2 Edge alarms (driver `GrassValley_K2_Edge_v1.js`) (Continued)

Alarm name	Type	Polling or trap?	Description	URI format	MIB name
Load 10 Min.	Both	Amount of space used on the logical disk (bytes)		<code>{baseuri}LogicalDisk{diskId}/hrStorageUsed</code>	
Partition Free Space (1 per partition)	Both	Initialization status of the disk recorder		<code>{baseuri}DiskRecorder{diskRecId}/drsAsBootState</code>	
Temperature	Both	Operational status of disk recorder chassis cooling fans		<code>{baseuri}DiskRecorder{diskRecId}/drsAsFans</code>	
Temperature Sensor Description	Both	Power supply redundancy state of the disk recorder		<code>{baseuri}DiskRecorder{diskRecId}/drsAsRedundantPower</code>	
Warning Text (per warning index)	Both	Operational status of the internal disk recorder repository		<code>{baseuri}DiskRecorder{diskRecId}/drsAsRepositoryState</code>	
Dead Programs	Both	Generalized state of the disk recorder's media storage system		<code>{baseuri}DiskRecorder{diskRecId}/drsAsStorageState</code>	
Memory Free	Both	Disk recorder chassis internal temperature in degrees		<code>{baseuri}DiskRecorder{diskRecId}/drsAsTemperature</code>	
Memory Total	Both	Thermal operating condition of the disk recorder		<code>{baseuri}DiskRecorder{diskRecId}/drsAsThermal</code>	

Table 1-51: K2 Edge alarms (driver `GrassValley_K2_Edge_v2.js`)

Alarm name	Per	Description	URI format
Communication Status	Device	Indicates communication status with the device	<code>{baseuri}commStatus</code>
Device Reboot	Device	Indicates reboot status of the device	<code>{baseuri}powerCycle</code>
Total Memory	Device	Total amount of memory available	<code>{baseuri}hrMemorySize</code>
Device Model	Device	Model of the device	<code>{baseuri}gvgElModel</code>
Operational State	Device	Operational state of the device	<code>{baseuri}gvgElState</code>

Table 1-51: K2 Edge alarms (driver `GrassValley_K2_Edge_v2.js`) (Continued)

Alarm name	Per	Description	URI format
Software Revision	Device	Software revision of the firmware on the device	<code>{baseuri}gvgElSoftwareRev</code>
Description	Device Logical Disk	Informative string pertaining the logical disk	<code>{baseuri}LogicalDisk{diskId}/hrStorageDe scr</code>
Size	Device Logical Disk	Total space available on the logical disk (bytes)	<code>{baseuri}LogicalDisk{diskId}/hrStorageSi ze</code>
Used	Device Logical Disk	Amount of space used on the logical disk (bytes)	<code>{baseuri}LogicalDisk{diskId}/hrStorageUs ed</code>
Boot State	Disk Recorder	Initialization status of the disk recorder	<code>{baseuri}DiskRecorder{diskRecId}/drsAsBo otState</code>
Fans Status	Disk Recorder	Operational status of disk recorder chassis cooling fans	<code>{baseuri}DiskRecorder{diskRecId}/drsAsFa ns</code>
Redundant Power	Disk Recorder	Power supply redundancy state of the disk recorder	<code>{baseuri}DiskRecorder{diskRecId}/drsAsRe dundantPower</code>
Repository State	Disk Recorder	Operational status of the internal disk recorder repository	<code>{baseuri}DiskRecorder{diskRecId}/drsAsRe positoryState</code>
Storage State	Disk Recorder	Generalized state of the disk recorder's media storage system	<code>{baseuri}DiskRecorder{diskRecId}/drsAsSt orageState</code>
Temperature	Disk Recorder	Disk recorder chassis internal temperature in degrees	<code>{baseuri}DiskRecorder{diskRecId}/drsAsTe mperature</code>
Thermal Status	Disk Recorder	Thermal operating condition of the disk recorder	<code>{baseuri}DiskRecorder{diskRecId}/drsAsTh ermal</code>
Video State	Disk Recorder	Video frame reference status of the disk recorder	<code>{baseuri}DiskRecorder{diskRecId}/drsAsVi deoReference</code>
Audio Date State	Disk Recorder Channel	Health of audio data handled by the channel	<code>{baseuri}DiskRecorder{diskRecId}/Channel {channelId}/drsCsAuState</code>
Operational State	Disk Recorder Channel	Channel operational state	<code>{baseuri}DiskRecorder{diskRecId}/Channel {channelId}/drsCsOpState</code>
Video Data State	Disk Recorder Channel	Health of video data handled by the channel	<code>{baseuri}DiskRecorder{diskRecId}/Channel {channelId}/drsCsViState</code>
Status	Disk Recorder Clip Inventory	Status of clip inventory	<code>{baseuri}DiskRecorder{diskRecId}/ClipInt ventory{clipInvId}/drsInvStatus</code>
Status	Disk Recorder File System	Status of file system	<code>{baseuri}DiskRecorder{diskRecId}/FileSys tem{fileSysId}/drsFsStatus</code>

Table 1-52: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Poll Interval	<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval.	30 seconds
Retries	<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed.	1 retry
Timeout	<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.	3 seconds
Read Community	<code>readCommunity</code>	SNMP read community string, used for SNMP polling.	"public"
Temperature threshold	<code>tempThreshold</code>	Threshold for GPU temperature alarm.	70
Hard drive temperature threshold	<code>hdTempThreshold</code>	Threshold for hard drive temperature alarms.	60
Memory threshold	<code>memThreshold</code>	Threshold before setting a memory alarm	2e20
Fan RPM threshold	<code>fanRPMThreshold</code>	Threshold before setting a Fan RPM alarm	0
Free space threshold	<code>freeSpaceThreshold</code>	Threshold before setting a HD space alarm	0
Load threshold	<code>loadThreshold</code>	Threshold before setting a load alarm	150
Throttling delay	<code>throttlingDelay</code>	Delay in milli seconds between each SNMP request	200

Table 1-53: Alarm parameters in iC Web

Parameter	Description
<code>diskRecId</code>	Disk Recorder ID (many per Device)
<code>diskId</code>	Logical Disk ID (many per Device)
<code>channelId</code>	Channel ID (many per Disk Recorder)
<code>clipInvId</code>	Clip Inventory ID (many per Disk Recorder)
<code>fileSysId</code>	File System ID (many per Disk Recorder)

Table 1-54: MIBs used

MIB	MIB file name
Host Resources MIB	HOST-RESOURCES-MIB.mib
Grass Valley Generic Physical Element MIB	GVG-ELEMENT-MIB.mib

Table 1-54: MIBs used (Continued)

MIB	MIB file name
Grass Valley Disk Recorder Status MIB	GVG-DRS-MIB.mib
Grass Valley Transfer Control and Monitoring MIB	GVG-TCM-MIB.mib

Base URI for alarms

Assuming an Application Server’s hostname is *AppServer1*, and the IP address of the K2 Summit device is 10.12.170.141:

snmp://AppServer1:K2_Summit:10.12.170.140/

Kaleido-K2 Solo Media Server



The Grass Valley K2 Solo is a media server. Broadcast-capable and optimized for both production and broadcast workflows, K2 Solo delivers all the same functionality as a two-channel K2 Summit 3G Production Client, but takes up 50% less space — ideal for small production studios and mobile production trucks. This high-quality HD/SD media server comes with 25 hours of HD storage and is also compatible with all applications that run on the K2 Summit 3G Production Client.

See the following for device support details:

- ["Alarms"](#) on page 55
- ["Configurable parameters"](#) on page 57
- ["Alarm parameters in iC Web"](#) on page 57
- ["MIBs used"](#) on page 57

Table 1-55: Alarms

Alarm name	Group	Per	Description	URI format
Used	Storage	Device Logical Disk	Amount of space used on the logical disk (bytes)	{baseuri}LogicalDisk{diskId}/hrStorageUsed
Management SW Build	Info	Device	Build number of the management software	{baseuri}systemManagementSoftwareBuildNumber
Global System Status	Chassis	Chassis	Global system status of the chassis	{baseuri}Chassis{chassisId}/systemStateGlobalSystemStatus
Management SW Global Version	Info	Device	Global version of the management software	{baseuri}systemManagementSoftwareGlobalVersionName
Communication Status	~	Device	Indicates communication status with the device	{baseuri}commStatus
Device Reboot	~	Device	Indicates reboot status of the device	{baseuri}powerCycle
Description	Storage	Device Logical Disk	Informative string pertaining the logical disk	{baseuri}LogicalDisk{diskId}/hrStorageDescr
Chassis Intrusion Status	Chassis	Chassis	Intrusion reading of all intrusion detection devices in the chassis	{baseuri}Chassis{chassisId}/systemStateChassisIntrusionStatusCombined
MIB Version Major	Info	Device	Major number of the MIB version (In this case, the version is 5.9)	{baseuri}mIBMajorVersionNumber
Allocated Memory	Storage Bridge	Device	Memory currently allocated for forward storage requests (kB)	{baseuri}sbsBrAllocatedMem
MIB Version Minor	Info	Device	Minor number of the MIB version (in this case, the version is 5.9)	{baseuri}mIBMinorVersionNumber
Device Model	Info	Device	Model of the device	{baseuri}gvgElModel
Management SW Name	Info	Device	Name of the management software	{baseuri}systemManagementSoftwareName
Operational State	Info	Device	Operational state of the device	{baseuri}gvgElState
Status	Storage Bridge	Device	Operational status of the storage bridge	{baseuri}sbsBrStatus
Software Revision	Info	Device	Software revision of the firmware on the device	{baseuri}gvgElSoftwareRev
Chassis State	Chassis	Chassis	State of the chassis	{baseuri}Chassis{chassisId}/systemStateChassisState
Amperage Status	Chassis	Chassis	Status of all amperage probes in the chassis	{baseuri}Chassis{chassisId}/systemStateAmperageStatusCombined
Cooling Device Status	Chassis	Chassis	Status of all cooling devices in the chassis	{baseuri}Chassis{chassisId}/systemStateCoolingDeviceStatusCombined
Memory Device Status	Chassis	Chassis	Status of all memory devices in the chassis	{baseuri}Chassis{chassisId}/systemStateMemoryDeviceStatusCombined

Table 1-55: Alarms (Continued)

Alarm name	Group	Per	Description	URI format
Power Supply Status	Chassis	Chassis	Status of all power supplies in the chassis	{baseuri}Chassis{chassisId}/systemStatePowerSupplyStatusCombined
Temperature Status	Chassis	Chassis	Status of all temperature probes in the chassis	{baseuri}Chassis{chassisId}/systemStateTemperatureStatusCombined
Power Units Status	Chassis	Chassis	Status of all the power unit(s) in the chassis	{baseuri}Chassis{chassisId}/systemStatePowerUnitStatusRedundancy
Voltage Status	Chassis	Chassis	Status of all voltage probes in the chassis	{baseuri}Chassis{chassisId}/systemStateVoltageStatusCombined
Base Board Status	Base Boards	Base Board	Status of the base board	{baseuri}Chassis{chassisId}/BaseBoard{baseboardId}/baseBoardStatus
Firmware Status	Firmwares	Firmware	Status of the firmware	{baseuri}Chassis{chassisId}/Firmware{firmwareId}/firmwareStatus
OS Status	Chassis	Chassis	Status of the operating system	{baseuri}Chassis{chassisId}/operatingSystemStatus
OS Memory Status	Chassis	Chassis	Status of the operating system memory	{baseuri}Chassis{chassisId}/operatingSystemMemoryStatus
System BIOS Status	BIOS	BIOS	Status of the system BIOS	{baseuri}Chassis{chassisId}/BIOS{biosId}/systemBIOSStatus
Chassis Status	Chassis	Chassis	System status of the chassis	{baseuri}Chassis{chassisId}/systemStateChassisStatus
Cooling Units Status	Chassis	Chassis	System status of the cooling units in the chassis	{baseuri}Chassis{chassisId}/systemStateCoolingUnitStatusRedundancy
Total Memory	Memory	Device	Total amount of memory available	{baseuri}hrMemorySize
Reserved Memory	Storage Bridge	Device	Total memory that the bridge has reserved for forward storage requests (kB)	{baseuri}sbsBrReservedMem
Size	Storage	Device Logical Disk	Total space available on the logical disk (bytes)	{baseuri}LogicalDisk{diskId}/hrStorageSize
Version	Storage Bridge	Device	Version descriptor for the storage bridge	{baseuri}sbsBrVersion
Management SW Version	Info	Device	Version of the management software	{baseuri}systemManagementSoftwareVersionNumberName

Table 1-56: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm Path	<code>alarmPath</code>	Path under which alarms are created in IC Nav	"GrassValley/K2_Media_Server (<IP>)"
Poll Interval	<code>pollInterval</code>	Period between repeated SNMP polls to the device	30 seconds
Retries	<code>retries</code>	Number of times to retry after a failed SNMP poll	1 retry
Timeout	<code>timeout</code>	Number of seconds to wait for a response before declaring SNMP poll failed	3 seconds
Read Community	<code>readCommunity</code>	SNMP read community string (password)	"public"
Storage Used Percentage Critical Threshold	<code>hrStorageCriticalPercent</code>	If the storage used exceeds this percentage, flag the storage used alarm to CRITICAL	0.9
Storage Used Percentage Warning Threshold	<code>hrStorageWarningPercent</code>	If the storage used exceeds this percentage, flag the storage used alarm to WARNING	0.8

Table 1-57: Alarm parameters in iC Web

Parameter	Description
<code>chassisId</code>	Chassis ID (many per Device)
<code>diskId</code>	Logical Disk ID (many per Device)
<code>baseBoardId</code>	Base Board ID (many per Chassis)
<code>biosId</code>	BIOS ID (many per Chassis)
<code>firmwareId</code>	Firmware ID (many per Chassis)

Table 1-58: MIBs used

MIB	MIB file name
Host Resources MIB	HOST-RESOURCES-MIB.mib
Dell 10892 MIB	MIB-Dell-10892.mib
Grass Valley Generic Physical Element MIB	GVG-ELEMENT-MIB.mib
Grass Valley SAN Storage Server MIB	GVG-SSR-MIB.mib
Grass Valley Storage Bridge Status MIB ¹	GVG-SBS-MIB.mib

1. A *Storage Bridge* is a combination of logical and/or physical entities that work in conjunction to essentially store and forward media storage control and IO requests between a set of dissimilar storage client and a set of storage provider architectures.

Base URI for alarms

Assuming an Application Server's hostname is *AppServer1*, and the IP address of the K2 Solo Media Server device is 10.12.170.140:

```
snmp://AppServer1:K2_Media_Server:10.12.170.140/
```

Kaleido-K2 Summit Production Client



The Grass Valley K2 Summit is a transmission server. The K2 Summit 3G Production Client is optimized for a broad range of production and broadcast applications and is the only server that supports end-to-end SD/HD workflows in DVCPRO, MPEG-2, AVC-Intra and H.264/AVCHD formats. With bidirectional channel control, you can quickly switch between record and play. Individual channels can be software configured for additional functions as well as the creation of low-resolution streams and proxy, making the the K2 Summit 3G Production Client the most versatile server available.

See the following for device support details:

- ["Alarms"](#) on page 58
- ["Configurable parameters"](#) on page 59
- ["Alarm parameters in iC Web"](#) on page 60
- ["MIBs used"](#) on page 60

Table 1-59: Alarms

Alarm name	Per	Description	URI format
Communication Status	Device	Indicates communication status with the device	{baseuri}commStatus
Device Reboot	Device	Indicates reboot status of the device	{baseuri}powerCycle
Total Memory	Device	Total amount of memory available	{baseuri}hrMemorySize
Device Model	Device	Model of the device	{baseuri}gvgElModel
Operational State	Device	Operational state of the device	{baseuri}gvgElState
Software Revision	Device	Software revision of the firmware on the device	{baseuri}gvgElSoftwareRev

Table 1-59: Alarms (Continued)

Alarm name	Per	Description	URI format
Description	Device Logical Disk	Informative string pertaining the logical disk	{baseuri}LogicalDisk{diskId}/hrStorageDe scr
Size	Device Logical Disk	Total space available on the logical disk (bytes)	{baseuri}LogicalDisk{diskId}/hrStorageSi ze
Used	Device Logical Disk	Amount of space used on the logical disk (bytes)	{baseuri}LogicalDisk{diskId}/hrStorageUs ed
Boot State	Disk Recorder	Initialization status of the disk recorder	{baseuri}DiskRecorder{diskRecId}/drsAsBo otState
Fans Status	Disk Recorder	Operational status of disk recorder chassis cooling fans	{baseuri}DiskRecorder{diskRecId}/drsAsFa ns
Redundant Power	Disk Recorder	Power supply redundancy state of the disk recorder	{baseuri}DiskRecorder{diskRecId}/drsAsRe dundantPower
Repository State	Disk Recorder	Operational status of the internal disk recorder repository	{baseuri}DiskRecorder{diskRecId}/drsAsRe positoryState
Storage State	Disk Recorder	Generalized state of the disk recorder's media storage system	{baseuri}DiskRecorder{diskRecId}/drsAsSt orageState
Temperature	Disk Recorder	Disk recorder chassis internal temperature in degrees	{baseuri}DiskRecorder{diskRecId}/drsAsTe mperature
Thermal Status	Disk Recorder	Thermal operating condition of the disk recorder	{baseuri}DiskRecorder{diskRecId}/drsAsTh ermal
Video State	Disk Recorder	Video frame reference status of the disk recorder	{baseuri}DiskRecorder{diskRecId}/drsAsVi deoReference
Audio Date State	Disk Recorder Channel	Health of audio data handled by the channel	{baseuri}DiskRecorder{diskRecId}/Channel {channelId}/drsCsAuState
Operational State	Disk Recorder Channel	Channel operational state	{baseuri}DiskRecorder{diskRecId}/Channel {channelId}/drsCsOpState
Video Data State	Disk Recorder Channel	Health of video data handled by the channel	{baseuri}DiskRecorder{diskRecId}/Channel {channelId}/drsCsViState
Status	Disk Recorder Clip Inventory	Status of clip inventory	{baseuri}DiskRecorder{diskRecId}/ClipInt ventory{clipInvId}/drsInvStatus
Status	Disk Recorder File System	Status of file system	{baseuri}DiskRecorder{diskRecId}/FileSys tem{fileSysId}/drsFsStatus

Table 1-60: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm Path	alarmPath	Path under which alarms are created in IC Nav	"GrassValley/K2_Su mmit(<IP>)"
Poll Interval	pollInterval	Period between repeated SNMP polls to the device	30 seconds

Table 1-60: Configurable parameters (*Continued*)

Parameter name	Parameter object key	Description	Default value
Retries	<code>retries</code>	Number of times to retry after a failed SNMP poll	1 retry
Timeout	<code>timeout</code>	Number of seconds to wait for a response before declaring SNMP poll failed	3 seconds
Read Community	<code>readCommunity</code>	SNMP read community string (password)	"public"
Storage Used Percentage Critical Threshold	<code>hrStorageCriticalPercent</code>	If the storage used exceeds this percentage, flag the storage used alarm to CRITICAL	0.9
Storage Used Percentage Warning Threshold	<code>hrStorageWarningPercent</code>	If the storage used exceeds this percentage, flag the storage used alarm to WARNING	0.8

Table 1-61: Alarm parameters in iC Web

Parameter	Description
<code>diskRecId</code>	Disk Recorder ID (many per Device)
<code>diskId</code>	Logical Disk ID (many per Device)
<code>channelId</code>	Channel ID (many per Disk Recorder)
<code>clipInvId</code>	Clip Inventory ID (many per Disk Recorder)
<code>fileSysId</code>	File System ID (many per Disk Recorder)

Table 1-62: MIBs used

MIB	MIB file name
Host Resources MIB	HOST-RESOURCES-MIB.mib
Grass Valley Generic Physical Element MIB	GVG-ELEMENT-MIB.mib
Grass Valley Disk Recorder Status MIB	GVG-DRS-MIB.mib
Grass Valley Transfer Control and Monitoring MIB	GVG-TCM-MIB.mib

Base URI for alarms

Assuming an Application Server's hostname is *AppServer1*, and the IP address of the K2 Summit device is *10.12.170.141*:

`snmp://AppServer1:K2_Summit:10.12.170.140/`

Kaleido-X

High-resolution Kaleido-X multi-image display processor.

NVision NV9000 System Controller

Router control system.

Trinix

Routing switchers.

Vertigo XG

Advanced HD/SD graphics processor.

vFlex Multi-purpose HD Video Data Inserter (*formerly mfg'd by Softel*)

vFlex is a multi-purpose ancillary data processor that can insert a range of video data in the transport stream.

Presented as a single-unit to save rack space, vFlex performs a large variety of data processing including, ancillary data encoding and decoding, opt cuing, ad insertion, wide screen signaling as well as graphic insertion for all HD and SD environments.

The plug-in supports several alarms some of which are informational, holding device information. Only one alarm is both a true alarm and consistently present in all variations of this plug-in's runtime: the **Device Communication** alarm (in the **Health Monitoring** sub-folder). The remaining alarms belong to individual modules.

Note: Each module will have at least one *Status* alarm.

See the following for device support details:

- ["Alarms"](#) on page 61
- ["Configurable parameters"](#) on page 62

Table 1-63: Alarms

Alarm name	Type	MIB point	Further details
--- Informational alarms about the device ---			
OS Platform	Text/info	osPlatform	OS platform
OS version	Text/info	osVersion	OS version
Process ID	Text/info	processID	Process ID
Process Name	Text/info	processName	Process Name
Process Started	Text/info	processStarted	Process Started
Process Priority	Text/info	processPriority	Process Priority
Process affinity	Text/info	processProcAffinity	Process affinity
Process time	Text/info	processProcTime	Process time
Process user time	Text/info	processUserProcTime	Process user time

Table 1-63: Alarms (*Continued*)

Alarm name	Type	MIB point	Further details
Process handle count	Text/info	<code>processHandles</code>	Process handle count
Process thread count	Text/info	<code>processThreads</code>	Process thread count
--- Health monitoring alarms ---			
Device Communication	Status/health		Raise a critical condition if the device stops responding to polling for a time period defined by <code>pollInterval</code> X retries.
--- Module alarms ---			
<module-specific status alarm>	Status Text/health		Module status.

Table 1-64: Configurable parameters

Parameter	Description
<code>retries</code>	If an SNMP request timeout, this defines the number of retries to be performed. Default: <code>3</code>
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request. Default: <code>10</code>
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plug-in of the same type. The <code>uniqueID</code> should be part of URI.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling. Default value: <code>public</code>
<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval of 15 seconds.

Plug-in Notes

- This plug-in uses the `generic.js` script.
- Traps are not supported.
- The RFC1213 MIB is not supported.
- OIDs with OS or process information are static. Alarm OIDs, however, are in arrays, and consequently can be dynamic. The poller performs an SNMP GET command on each OID of the array. Multiple varbind requests are not used since some issues have been seen during real device test.
- The Vflex MIB was created to be highly generic. It defines modules. Each modules can have a list of parameters (`moduleValue`). Each parameter has different properties:
 - `name`—used for GSM alarm name
 - `value`—used to fill GSM alarm text
 - `condition`—used to set GSM alarm status.
- Currently, handled conditions are:

- ok, normal—sets status to **NORMAL**
- warning—sets status to **MINOR**
- error—sets status to **CRITICAL**
- unknown—sets status to **NORMAL**
- If a condition string is not handled, the default behavior is to set status to **NORMAL**.
- The consequence of this generic MIB and this implementation is that alarms are not known before starting the plug-in, possibly making integration more difficult.
- Alarms are dynamic, so in every refresh period (default is 5 minutes), arrays are reconstructed.

IMPORTANT: Although OIDs in arrays probably will not change during the device runtime, this should not be assumed to be the case; some cards **MAY** be hot-plugged or else software modules disconnected, which could change the available OIDs.

MIBs Used

- SOFTEL-VFLEX-MIB
- SOFTEL-GROUP-MIB

Harmonic

Table 1-65: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"CID-3100 Decryptor"		SNMP – Harmonic CID-3100	IC-SNMP-105
"Electra"	5.00	SNMP – Harmonic Electra	IC-SNMP-211
"MaxLINK HOA 8030"		SNMP – Harmonic EDFA HOA8030	IC-SNMP-100
"ProView 2900 Receiver/Decoder"		SNMP – Harmonic ProView 2900	IC-SNMP-119
"ProView 7000/7100 Integrated Receiver-Decoder and Stream Processor"	6.02	SNMP – Harmonic ProView 7000/7100	IC-SNMP-119

CID-3100 Decryptor

Electra

MaxLINK HOA 8030

The Harmonic MAXLink™ HOA 8030 is a Video Optical Amplifier designed to provide optical amplification of 1550 nm RF video signals in FSN compliant passive optical networks.

ProView 2900 Receiver/Decoder

ProView 7000/7100 Integrated Receiver-Decoder and Stream Processor



ProView 7000 (top) and ProView 7100 (bottom)

Harmonic’s ProView™ 7000 and 7100 are single-rack-unit, scalable, multi-format integrated receiver-decoders (IRD), transcoders and MPEG stream processors. The ProView 7000/7100 offers broadcast-quality SD/HD MPEG-2 and MPEG-4 AVC decoding and video transcoding.

See the following for device support details:

- ["Alarms"](#) on page 64
- ["Configurable parameters"](#) on page 67

Table 1-66: Alarms

Alarm name	Type	Optional?	Further details
--- Health monitoring alarms ---			
Hardware failure	Text/Status	No	
Fan failure	Text/Status	No	
Fan failure	Text/Status	No	
Ethernet link down	Text/Status	No	
Critical high temperature detected	Text/Status	No	
Backup port activated	Text/Status	No	
Ethernet backup port active	Text/Status	No	
Ethernet Gbe Port fail	Text/Status	No	

Table 1-66: Alarms (*Continued*)

Alarm name	Type	Optional?	Further details
High temperature warning	Text/Status	Yes	
Critical Software card error	Text/Status	Yes	
Ethernet AutoNegotiation failed	Text/Status	Yes	
Firmware download failure	Text/Status	Yes	
Firmware upgrade failure	Text/Status	Yes	
Voltage error	Text/health	Yes	
Communication Status	Status	No	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status	No	Raise a minor condition based on the value of sysUpTime read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	Text/Status	No	
--- MPEG alarms ---			
MPEG Sync loss	Text/Status	No	
Output overflow	Text/Status	No	
Program Decoding failure	Text/Status	No	
DSR sync loss	Text/Status	No	
Continuity error on primary port	Text/Status	No	
Input overflow	Text/Status	No	
Program decoding Failure PCR err	Text/Status	Yes	
Program decoding failure unsupported	Text/Status	Yes	
Framrate mismatch	Text/Status	Yes	
Low delay stream in normal mode	Text/health	Yes	
AC gen lock not synched	Text/Status	Yes	
AC Eth dejitter fail	Text/Status	Yes	
Pid Conflict	Text/health	Yes	
MPEG synch loss on backup port	Text/Status	Yes	
Continuity error on backup port	Text/Status	Yes	
Pid missing on primary port	Text/Status	Yes	
Pid missing error on backup port	Text/Status	Yes	
xcoder engine failure	Text/Status	Yes	
xcoding unsupported content	Text/Status	Yes	

Table 1-66: Alarms (*Continued*)

Alarm name	Type	Optional?	Further details
xcoding Scrambled input	Text/Status	Yes	
xcoding DTS PTS errors	Text/Status	Yes	
xcoding PCR error	Text/Status	Yes	
xcoding pid missing	Text/Status	Yes	
xcoding input errors	Text/Status	Yes	
xcoding Resolution Mismatch	Text/Status	Yes	
xcoding Codec Mismatch	Text/Status	Yes	
ac Dec Resolution Mismatch	Text/Status	Yes	
ac Vmx Descr Over Provision	Text/Status	Yes	
ac Vmx Descr Init Failure	Text/Status	Yes	
ac Dr Activated	Text/Status	Yes	
ac Dr Scanning	Text/Status	Yes	
ac Dr Alt Uplink Active	Text/Status	Yes	
ac Mux In Dejitter Failure	Text/Status	Yes	
ac Mux In Dejitter Failure Backup	Text/health	Yes	
ac T2mi Pid Missing On Primary Port	Text/Status	Yes	
ac T2mi Pid Missing On Backup Port	Text/Status	Yes	
ac T2mi Not Detected On Primary Port	Text/Status	Yes	
ac T2mi Not Detected On Backup Port	Text/Status	Yes	
ac T2mi Plp Missing On Primary Port	Text/Status	Yes	
ac T2mi Plp Missing On Backup Port	Text/Status	Yes	
--- RF alarms ---			
cam Missing	Text/Status	No	
carrier Not Detected	Text/Status	No	
demodulation Failure	Text/Status	No	
input Failure	Text/Status	No	
satellite Ber TooHigh	Text/Status	Yes	
satellite Ebn Too Low	Text/Status	Yes	
program Xc Not Descrambled	Text/Status	Yes	
cam Packet Loss	Text/Status	Yes	
cam Zero Bitrate	Text/Status	Yes	
cam Descrambling Failure	Text/Status	Yes	

Table 1-66: Alarms (*Continued*)

Alarm name	Type	Optional?	Further details
satellite Per Too High	Text/Status	Yes	
cam Input Overflow	Text/Status	Yes	
embedded Descrambler Input Overflow	Text/Status	Yes	
input Bitrate Overflow	Text/Status	Yes	

Table 1-67: Configurable parameters

Parameter	Description
<code>alarmPath</code>	Force a Path where to create the plugin alarms
<code>pollInterval</code>	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling.
<code>lightweightDriver</code>	Set the plugin to monitor only criticals alarms. Default is false.
<code>signalForcedSeverity</code>	Text indicating the forced severity for service alarms. Possible values: CRITICAL, MAJOR, MINOR
<code>healthForcedSeverity</code>	Text indicating the forced severity for health alarms. Possible values: CRITICAL, MAJOR, MINOR

Harris (Leitch)

Table 1-68: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"IconStatus Channel Branding"	4.30	SNMP – Harris IconStation	IC-SNMP-148
"NetPlus M400 Integrated Receiver/Decoder"	4.30	SNMP – Harris NetPlus M400	IC-SNMP-156
"NetVX Contribution Encoder"		SNMP – Harris NetVx Frame	IC-SNMP-157
"Panacea Routing Switcher"		SNMP – Harris Panacea	IC-SNMP-096

IconStatus Channel Branding

IconStation is an on-air advanced channel branding system that simplifies the creation, display and maintenance of a consistent brand.

NetPlus M400 Integrated Receiver/Decoder

The NetPlus™ M400 is a broadcast-grade, satellite integrated receiver/decoder (IRD) that supports a wide range of global standards for video and audio compression. It includes DVB-S/S2 demodulation capabilities and inputs for DVB-ASI and IP. Additionally, the NetPlus M400 supports MPEG-2 and H.264 video compression — from the 4:2:2 format to SD and HD formats — as well as MPEG, Dolby® Digital AAC and SMPTE 302 audio systems.

NetVX Contribution Encoder

Panacea Routing Switcher

Hewlett Packard

Table 1-69: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"P2000 SAN Storage"		SNMP – HP P2000 SAN Storage	IC–SNMP–199
"ProLiant DL-Series Enterprise Servers"	5.00	SNMP – HP DL Series	IC–SNMP–214

P2000 SAN Storage

ProLiant DL-Series Enterprise Servers

Huawei

Table 1-70: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"iManager I2000 NMS System"		SNMP – Huawei I2000 NMS system	IC–SNMP–228

iManager I2000 NMS System

Huawei's iManager I2000 NMS System provides network management solutions covering several fields including voice, data, operational support, and 3G and IMS-integrated service, as

well as northern interfaces, to support operators as they construct integrated network management.

Hy-gain

Table 1-71: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DCU-1"	4.10	SERIAL – Hygain DCU1	

DCU-1

The Hygain DCU1 Pathfinder digital control unit is used to control and steer the HAM-V antenna rotator system.

IETF

Table 1-72: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"HOST-RESOURCES MIB"		SNMP Host Resource MIB	IC-SNMP-148
"Internet Control Message Protocol (ICMP)"			
"MIB-II (RFC 1213)"		SNMP RFC1213	
"RMON (RFC 2819)"		SNMP RMON	IC-SNMP-002

HOST-RESOURCES MIB

The HOST-RESOURCES MIB, developed by the Internet Engineering Task Force (IETF), is for use in managing host systems. The term *host* is construed to mean any computer that communicates with other similar computers attached to the internet and that is directly used by one or more human beings. Although this MIB does not necessarily apply to devices whose primary function is communications services (e.g., terminal servers, routers, bridges, monitoring equipment), such relevance is not explicitly precluded. This MIB instruments attributes common to all internet hosts including, for example, both personal computers and systems that run variants of Unix.

Internet Control Message Protocol (ICMP)

The Internet Control Message Protocol (ICMP), developed by the Internet Engineering Task Force (IETF), is used by a gateway or destination host to communicate with a source host, for example, to report an error in datagram processing.

MIB-II (RFC 1213)

RFC 1213, developed by the SNMP Working Group of the Internet Engineering Task Force (IETF), defines the second version of the Management Information Base (MIB-II) for use with network management protocols in TCP/IP-based internets. In particular, together with its companion memos which describe the structure of management information (RFC 1155) along with the network management protocol (RFC 1157) for TCP/IP-based internets, these documents provide a simple, workable architecture and system for managing TCP/IP-based internets and in particular the Internet community.

RMON (RFC 2819)

Remote Monitoring (RMON) is an Internet Engineering Task Force (IETF) standard that enables various network monitors and console systems to exchange monitoring data. It is used in telecommunications equipment, such as routers, that implement a MIB (Management Information Base) which supports remote monitoring. RMON uses an agent running on the device being monitored to supply information over SNMP to a monitoring/control system (e.g. iControl).

IneoQuest

Table 1-73: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"IVMS Video Management System"	4.40	SNMP – IneoQuest IVMS	IC-INEOQUEST-IVMS
"Singulus G1-T"	6.04	SNMP – IneoQuest Singulus	IC-SNMP-085

IVMS Video Management System

The IVMS video management system is a real-time, end-to-end performance monitoring system of video distribution networks. IVMS is an SNMP server to which all Ineoquest probes may connect. These probes are:

- IQ LBAND probe—Ineoquest *Plurys*
- IQ IP probe—Ineoquest *Expedus*
- IQ QAM probe—Ineoquest *Cricket*

When a probe detects a problem along the path, an error is set to IVMS. The IVMS SNMP plugin can fetch alarms or handle SNMP traps. In iControl, GSM alarms can be set using two different mechanisms:

- polling the active alarm table
- using an SNMPv2 trap

See the following for details of iControl's support of IVMS:

- ["Configurable parameters"](#) on page 71

- ["MIBs used"](#) on page 72
- ["GSM Alarms"](#) on page 72

Table 1-74: Configurable parameters

Parameter	Description
<code>alarmPath</code>	Force a Path where to create the plugin alarms.
<code>omitMuxNames</code>	If true, then use Probe/Service only to identify alarms. When creating alarms, Initial list array can be configured with or without Mux names indentation level. It seems the plugin evolved : using mux name is the old way.
<code>pollInterval</code>	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>tunnelingTrapHost</code>	IP address of tunneling appserver, if any.
<code>useLongAlarmNames</code>	If true, append probe/Mux/Service names to service alarm name.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling.
<code>writeCommunity</code>	SNMP write community string. Use to send SNMP-set commands.
<code>alarmTextSeparator</code>	Separator of alarms text in a string. Used in overall text to describe all active alarms.
<code>clearedAlarmText</code>	Text to set in overall alarm when alarms are cleared.
<code>retries</code>	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
<code>Polling_Port</code>	Remote Port number to use for SNMP polling
<code>Trap_Port</code>	Local port number to open for SNMP trap handling
<code>alarmLevel</code>	GSM alarm level to set when an IVMS alarm is detected
<code>pollingSeverities</code>	
<code>trapSeverities</code>	
<code>useDetailedAlarms</code>	
<code>initialList</code>	Initial array to configure IVMS plugin ; unique couple of Probe/Service, or probe/Mux/Service, depending on omitMuxNames parameter.
<code>monitorTS</code>	If set to true, Transport stream alarms will be monitored. Default is false.

Table 1-74: Configurable parameters (*Continued*)

Parameter	Description						
<code>realSeverity</code>	<p>If set to true, the alarm status (overall and detailed alarms for both programs and TS) are set according this map:</p> <p>iVMS ---> GSM alarm</p> <table> <tr> <td>CRITICAL</td><td>CRITICAL</td></tr> <tr> <td>MAJOR</td><td>MAJOR</td></tr> <tr> <td>MINOR</td><td>MINOR</td></tr> </table> <p>Default is false. It means that alarms are set with a fixed error level (which can be configured with <code>alarmLevel</code>).</p>	CRITICAL	CRITICAL	MAJOR	MAJOR	MINOR	MINOR
CRITICAL	CRITICAL						
MAJOR	MAJOR						
MINOR	MINOR						
<code>progAlarmLevel</code>	<p>Set the program alarm level. 2 by default (value used in legacy projects). We are not sure of the difference between Level 2 and Level 3 for programs alarms.</p>						
<code>tsAlarmLevel</code>	<p>Set the Transport stream alarm level. 3 by default (advised by Ineoquest support because alarms are aggregated).</p>						

Table 1-75: MIBs used

MIB	MIB file name
IneoQuest North-bound Interface MIB	<code>IQNorthboundInterface.mib</code>
IneoQuest Mediamon MIB	<code>IQMEDIAMON-MIB.mib</code>

GSM Alarms

GSM alarms are created for every services on a given probe.

Singulus G1-T

The Singulus G1-T is an advanced network development & analysis system for media-over-IP enabled networks. The Grass Valley driver supports the Singulus G1-T video-over-IP probe.

The Singulus G1-T is a multi-functional platform for monitoring, analyzing, troubleshooting, test and measurement of video networks. The Singulus G1-T connects to the video network through a 10/100/1000 Ethernet port and provides either network traffic generation (Stimulus) or monitoring and analysis. Based on reconfigurable technology, the Singulus G1-T allows the user to configure the hardware into alternate modes of operation. The Singulus G1-T can be configured as an advanced development and troubleshooting platform or a simple remote video monitoring platform. The user can easily switch operational modes using a web page interface.

- ["Alarms provided by the driver"](#) on page 73
- ["Parameters"](#) on page 73

Table 1-76: Alarms provided by the driver

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
Device Communication	Status	Poll	<code>deviceCommAlarm</code>		
Device Restart	Status	Poll	<code>deviceRestartAlarm</code>		
System Uptime	Text	Poll	<code>sysUpTime</code>	<code>sysUpTime</code>	<code>.1.3.6.1.2.1.1.3</code>
Current Bitrate	Text	Poll	<code>Stream__My_ioQCMediaStreamAddress_strin/ioQCMMediaStreamCurrentBitRate</code>	<code>ioQCMMediaStreamCurrentBitRate</code>	<code>.1.3.6.1.4.1.15181.101.1.2.4.6.1.10</code>
MDI Delay Factor	Text	Poll	<code>Stream__My_ioQCMediaStreamAddress_strin/ioQCMTransportStreamMDIDF</code>	<code>ioQCMTransportStreamMDIDF</code>	<code>.1.3.6.1.4.1.15181.101.1.2.4.7.1.6</code>
MDI Loss Rate	Text	Poll	<code>Stream__My_ioQCMediaStreamAddress_strin/ioQCMTransportStreamMDILossRate</code>	<code>ioQCMTransportStreamMDILossRate</code>	<code>.1.3.6.1.4.1.15181.101.1.2.4.7.1.7</code>
MDI Total Loss	Text	Poll	<code>Stream__My_ioQCMediaStreamAddress_strin/ioQPMGraphIv1MDITotalLoss</code>	<code>ioQPMGraphIv1MDITotalLoss</code>	<code>.1.3.6.1.4.1.15181.101.1.4.4.1.6</code>
Stream Address	Text	Poll	<code>Stream__My_ioQCMediaStreamAddress_strin/ioQCMMediaStreamAddress</code>	<code>ioQCMMediaStreamAddress</code>	<code>.1.3.6.1.4.1.15181.101.1.2.4.6.1.5</code>
Stream Current Status	Status	Poll	<code>Stream__My_ioQCMediaStreamAddress_strin/ioQPMStreamIv1Status</code>	<code>ioQPMStreamIv1Status</code>	<code>.1.3.6.1.4.1.15181.101.1.4.5.1.7</code>
Number Of Active Streams	Text	Poll	<code>ActiveStreamNumber</code>		

Certain parameters can be passed to the driver, as follows:

Table 1-77: Parameters

Name	Description/Notes	Default value	Configurable in GUI
<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval.		No
<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed.	1	No
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.		No
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The unique ID should be part of the URI.		No

Table 1-77: Parameters (*Continued*)

Name	Description/Notes	Default value	Configurable in GUI
readCommunity	SNMP read community string, used for SNMP polling.	Public	No
writeCommunity	SNMP write community string, used to send SNMP-set commands.		No

Infortrend

Table 1-78: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SAN Storage"		SNMP – Infortrend SAN Storage	IC-SNMP-200

SAN Storage

Infortrend's storage systems for SAN environments are designed to meet the needs of SMBs and mid-range and large enterprises. Infortrend's SAN storage solutions provide a comprehensive set of data services, including virtualized SAN storage solutions, local and remote replication, and thin provisioning.

Intel

Table 1-79: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SR-Series Server Systems"		SNMP – Intel SR-Series Server Systems	IC-SNMP-201

SR-Series Server Systems

The Intel SR-series server systems are rack-optimized, highly integrated server systems for high-density, energy-efficient applications. This family of server systems have as target applications, high-performance computing, video server, virtualization platform, and general purpose data center building blocks.

International Datacasting Corp. (formerly Logic Innovations)

Table 1-80: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"IPE-4000"	6.02	SNMP – Logic Innovations IPE-4000	IC-SNMP-242
"RS-1100"	6.02	SNMP – Logic Innovations RS-1100	IC-SNMP-243
"TSx-2800"	6.03	SNMP – Logic Innovations TSx2800	IC-SNMP-251

IPE-4000



The Logic Innovation IPE-4000 is a Linux-based IP Encapsulator. The IPE-4000 provides the necessary link between IP networks and broadband DVB or ATSC networks.

See ["Alarms"](#) on page 75 for device support details:

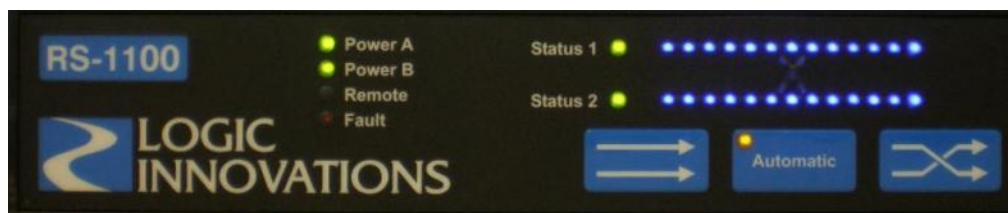
Table 1-81: Alarms

Alarm name	MIB point	Further details
Firmware	aboutFirmware	
Uptime	aboutUptime	
system Clock	systemClock	
system Temp Processor	systemTempProcessor	
system Temp System	systemTempSystem	
system Temp Dimm	systemTempDimm	
system Fan Speed 1	systemFanSpeed1	
system Fan Speed 2	systemFanSpeed2	
system Fan Speed 3	systemFanSpeed3	
system Fan Speed 4	systemFanSpeed4	
system Voltage In 0	systemVoltageIn0	
system Voltage In 1	systemVoltageIn1	
system Voltage In 2	systemVoltageIn2	
system Voltage In 3	systemVoltageIn3	

Table 1-81: Alarms (Continued)

Alarm name	MIB point	Further details
system Voltage In 4	systemVoltageIn4	
Data Speed	networkDataSpeed	
Data Duplex	networkDataDuplex	
Data Rx Packets	networkDataRxPackets	
Data Rx Bytes	networkDataRxBytes	
Data Rx Errors	networkDataRxErrors	
Data Rx Drops	networkDataRxDrops	
Data Tx Packets	networkDataTxPackets	
Data Tx Bytes	networkDataTxBytes	
Data Tx Errors	networkDataTxErrors	
Data Tx Drops	networkDataTxDrops	
Mnc Speed	networkMncSpeed	
Mnc Duplex	networkMncDuplex	
Mnc Rx Packets	networkMncRxPackets	
Mnc Rx Bytes	networkMncRxBytes	
Mnc Rx Errors	networkMncRxErrors	
Mnc Rx Drops	networkMncRxDrops	
Mnc Tx Packets	networkMncTxPackets	
Mnc Tx Bytes	networkMncTxBytes	
Mnc Tx Errors	networkMncTxErrors	
Mnc Tx Drops	networkMncTxDrops	
buffer overrun	bufferOverrunAlarmStatus	Notification sent out when the buffer overrun alarm changes status

RS-1100



International Datacasting's RS-1100 is a 75-ohm broadband transfer switch that offers broadcasters and teleport operators the ability to obtain higher signal reliability in an efficient

1-RU, half width device. In the case of a fault, the RS-1100 performs a switch to keep a system on the air.

See ["Alarms"](#) on page 77 for device support details:

Table 1-82: Alarms

Alarm name	Type	Polling or trap?	MIB point	Further details
--- Health monitoring alarms ---				
Device Communication	Status/health	Poller	<code>sysUpTime</code> (RFC1213)	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	Status/health	Poller	<code>sysUpTime</code> (RFC1213)	Raise a minor condition based on the value of <code>sysUpTime</code> read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
System uptime	text/health	Poller	<code>sysUpTime</code> (RFC1213)	System up time alarm, this is a default health monitoring alarm when you use the <code>generic.js</code> to create a new custom driver
--- Signal alarms ---				
hw_revision	Text	Fast poller	<code>hw_revision</code>	
sw_version	Text	Fast poller	<code>sw_version</code>	
serial_number	Text	Fast poller	<code>serial_number</code>	
fault input 1	Status	Fast poller	<code>fault_input_1</code>	
fault input 2	Status	Fast poller	<code>fault_input_2</code>	
power A	Status	Fast poller	<code>power_A_status</code>	
power B	Status	Fast poller	<code>power_B_status</code>	
control_source	Text	Fast poller	<code>control_source</code>	
fp_force_mode	Text	Fast poller	<code>fp_force_mode</code>	
contact closure	Status	Fast poller	<code>input_contact_closure</code>	
switch mode	Text	Fast poller	<code>switch_mode</code>	
switch state	Text	Fast poller	<code>switch_state</code>	
fault output	Status	Fast poller	<code>fault_output</code>	

TSx-2800



The plug-in can support two types of device:

- TSS-2800—Transport Stream Switch
- TSM-2800—Transport Stream Multiplexer

This plug-in uses the `generic.js` script. All alarms can be polled (static OIDs). The plug-in supports both polling and traps. Traps are supported for input / output status. SNMP OIDs are monitored only, not driven. Some alarms use a parameter so as to detect if it should be raised or not:

- Health alarms (temperature, voltage)
- Active output

In every case, the parameter default value prevents dedicated alarms from being raised. Threshold or main output should be checked while integrating plug-in / device.

See the following for details of iControl's support of IVMS:

- ["Alarms"](#) on page 78
- ["Configurable parameters"](#) on page 80

Table 1-83: Alarms

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms ---			
Device Communication	status	<code>sysUpTime</code> (RFC1213)	Created and monitored by generic.js
Device Restart	status		Created and monitored by generic.js
System uptime	text		Created and monitored by generic.js
temperature 1	status/text	<code>temperature1</code>	temperature - can raise an alarm if temperature > threshTemp
temperature 2	status/text	<code>temperature2</code>	temperature - can raise an alarm if temperature > threshTemp
voltage 5	status/text	<code>voltage5</code>	monitor 5V - can raise an alarm if voltage > (5 + deltaVolt) or voltage < (5 - deltaVolt)

Table 1-83: Alarms (Continued)

Alarm name	Type	MIB point	Further details
voltage 12	status/text	voltage12	monitor 12V - can raise an alarm if voltage > (12 + deltaVolt) or voltage < (12 - deltaVolt)
voltage 15	status/text	voltage15	monitor 1.5V - can raise an alarm if voltage > (1.5 + deltaVolt) or voltage < (1.5 - deltaVolt)
voltage 18	status/text	voltage18	monitor 1.8V - can raise an alarm if voltage > (1.8 + deltaVolt) or voltage < (1.8 - deltaVolt)
voltage 33	status/text	voltage33	monitor 3.3V - can raise an alarm if voltage > (3.3 + deltaVolt) or voltage < (3.3 - deltaVolt)
--- Info alarms ---			
Bootcode version	text	bootcodeVersion	
Hardware version	text	hardwareVersion	
Software version	text	softwareVersion	Can be useful to memorize this value to ease future integration.
mac Address	text	macAddress	
Nb input channel licensed	text	licensedInputChannels	The TSx2800 has 8 inputs. But its input number can be limited with a license.
Product name	text	productName	
unit name	text	unitName	
--- Inputs alarms¹ ---			
CableStatus	status	inputCableStatus	Reports whether the channel is enabled for a given input channel.
ChannelEnable	status	inputChannelEnable	Reports whether the external fault is detected for a given input channel.
FaultRelayStatus	status	inputFaultRelayStatus	Reports whether the input cable is connected for a given input channel.
SyncStatus	status	inputSyncStatus	Reports whether the input transport stream lost sync for a given input channel
--- Output alarms² ---			
Active output	status	switchActiveOutput	Active output channel
output Fault Relay	status	outputFaulted	Reports whether the output is faulted
Current Virtual Output	status/text	currentVirtualOutputStatus	Current output good/not good.
Virtual Output	status/text	virtualOutputStatus	Good virtual output exists/does not exist
--- Switch Conf alarms³ ---			
fault if no valid Output	text	faultOnNoValidOutput	Drive fault out when no output channel can switched to that is 100%

Table 1-83: Alarms (*Continued*)

Alarm name	Type	MIB point	Further details
Mode	text	<code>switchMode</code>	Select either minimal switching or preferred primary switching mode
On Sync Loss	text	<code>switchOnSyncLoss</code>	Enables a switch on input channel sync loss
Return delay	text	<code>switchReturnDelay</code>	Select the delay before returning to a valid higher priority output channel
Tuning	text	<code>switchTuning</code>	Milli-second tuning value.

1. There is a physical limitation of 8 inputs. All these alarms exist for every input. Inputs and associated alarms may not exist according to the license.
2. There is a physical limitation of 4 outputs. These alarms are global and NOT duplicated for each output.
3. This is useful information about the switch configuration and what can trigger the output switch.

Table 1-84: Configurable parameters

Parameter	Description
<code>pollInterval</code>	Poller interval in seconds
<code>retries</code>	If an SNMP request timeout, this defines the number of retries to be performed. Default is 1.
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
<code>threshTemp</code>	Threshold before raising temperature alarm. Default value : 100.
<code>deltaVolt</code>	Raise alarm when voltage nominal value differs more than this value. Default value : 20. For example, with monitored 12Volts, alarm is raised when voltage goes under -8V or is above 38V.
<code>mainOutput</code>	Set which output should be the main one. Raise activeOutput alarm to WARNING if active output is not the main one. Default is "", so main output is not configured and consequently active output alarm is never raised.

TSM-2800

The TSM-2800 provides extensive table processing and stream grooming and analysis capabilities for combining and manipulating streams. Support for opportunistic data and PSIP insertion provides operators with the ability to tailor streams for local broadcasts and fully utilize available bandwidth.

IRTrans

Table 1-85: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"LAN Controller XL Infrared Control System"		SNMP – IRTrans LAN Controller XL	IC-DR-016

LAN Controller XL Infrared Control System

The IRTrans LAN Controller XL is an infrared LAN controller with eight IR outputs, an RS232 interface, 2 inputs for external receivers, 4 relay outputs, and a 10/100 Mb Ethernet connection.

Isilon

Please see ["EMC"](#), on page 30.

JDSU

Table 1-86: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MVP-200 MPEG Video Probe"		SNMP – JDSU MVP-200	IC-SNMP-162
"VSA API v2"	6.02		IC-SNMP-255

MVP-200 MPEG Video Probe

VSA API v2

The VSA is an MPEG-2 Video Probe. The VSA typically supports a 4-port Napatech Gigabit card and can run MPEG-2 analysis on each port simultaneously.

See ["Alarms"](#) on page 81 for device support details:

Table 1-87: Alarms

Alarm name	Type	Further details
--- Health monitoring alarms ---		
Communication	Status/health	Raise a critical condition if the device does not respond to HTTP request or does not respond with HTTP code 200.
Notification ready	Status/health	Set to critical condition at start. The status is cleared as soon as a notification is received.
Board [X] Status	StatusText	There is an alarm for each board seen by the plugin. State can be normal / "monitoring", or critical / "idle".
AlarmCount	Text	Shows the number of "statefull" alarms that are read from "nmap" query. If lightweight_driver is set, then this alarm should show 0.
API version	Text	Show the VSA API version of the device

Table 1-87: Alarms (*Continued*)

Alarm name	Type	Further details
--- Streams alarms ---		
Overall	Status	Virtual alarm for status and detailed alarms.
Status	Status	Overall alarm given by the VSA for the stream.

Lawo

Table 1-88: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Nova73 Digital Audio Matrix"		SNMP – Lawo Nova73	IC-SNMP-089

Nova73 Digital Audio Matrix
Audio router/encoder.

Leitch

Please see "[Harris \(Leitch\)](#)", on page 67.

Logic Innovations

Please see "[International Datacasting Corp. \(formerly Logic Innovations\)](#)", on page 75.

Met One Instruments

50.5 Wind Sensor
Automatic Weather System (AWS) wind sensor.

Microsoft

Table 1-89: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Interactive Program Guide"		SNMP – Microsoft IPG Server	IC-SNMP-106
"Windows 7"		SNMP Host Resource MIB	IC-SNMP-135
"Windows® SNMP Agent"			

Interactive Program Guide

Windows 7

Windows® SNMP Agent

The HostResources driver can be used to measure the amount of storage space remaining on a host running Windows. The SNMP Agent component must be enabled first. The alarms are repeated per storage device on the host computer.

Miteq Inc.

Table 1-90: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Modulator 172138"	6.02	SNMP – Miteq modulator	IC-SNMP-247
"NSU1 160061"	6.02	SNMP – Miteq NSU1 Switchover	IC-SNMP-246

Modulator 172138

A modulator commonly varies some aspect (amplitude, phase or frequency) of an RF carrier (f_c) in proportion to a much lower frequency video or digital input signal (f_m). In general, the input frequency components of the modulation typically extend from DC to 100 MHz, except for fast data links.

In order to preserve the information content superimposed on the RF carrier, one must insure that the output system bandwidth is adequate to pass both upper and lower sidebands (i.e. $f_c + f_m$) without distortion. In fact, system amplifier and channel distortion often will add residual AM or PM modulation to an otherwise clean transmitter.

See the following for device support details:

- "Alarms" on page 83
- "Configurable parameters" on page 85

Table 1-91: Alarms

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms --- <i>Theses alarms are created by generic.js</i>			
Device Communication	Status/health	sysUpTime (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.

Table 1-91: Alarms (*Continued*)

Alarm name	Type	MIB point	Further details
Device Restart	Status/health	<code>sysUpTime</code> (RFC1213)	Raise a minor condition based on the value of <code>sysUpTime</code> read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.

--- **Info alarms** ---

Theses alarms are created by the plug-in itself

Transfer Switch Mode	Status/health	<code>xferSwFlt</code>	Transfer Switch Indicator switch fault status
Summary Alarm	Status/health	Summary Alarm	Summary (overall) Alarm status
+15V Supply rail	StatusText/health	<code>pos15Rail</code>	+15.3V Supply rail. Alarm is set to CRITICAL when the measured voltage is under the parameter <code>pos15vThresh</code> .
+5V Supply rail A	StatusText/health	<code>pos5ARail</code>	+5V Supply rail A. Alarm is set to CRITICAL when the measured voltage is under the parameter <code>pos5vThresh</code> .
+5V Supply rail B	StatusText/health	<code>pos5BRail</code>	+5V Supply rail B. Alarm is set to CRITICAL when the measured voltage is under the parameter <code>pos5vThresh</code> .
-15V Supply rail	StatusText/health	<code>neg15Rail</code>	-15V Supply rail. Alarm is set to CRITICAL when the measured voltage is above the parameter <code>neg15vThresh</code> .
Temperature	Text/health	<code>temperature</code>	Temperature in degrees C
Local Oscillator Lock Alarm	Status/health	<code>moreStatus</code>	Local Oscillator Lock Alarm
Power supply Alarm	Status/health	<code>moreStatus</code>	Power Supply Alarm
Local Oscillator Level Alarm	Status/health	<code>moreStatus</code>	Local Oscillator Level Alarm (Optional)
Amplifier Current Alarm	Status/health	<code>moreStatus</code>	Amplifier Current Alarm (Optional)
External Alarm	Status/health	<code>moreStatus</code>	External Alarm
Temperature Alarm	Status/health	<code>moreStatus</code>	Temperature Alarm (Optional)
Module communications Alarm	Status/health	<code>moreStatus</code>	Module communications Alarm (Optional)

--- **Status path alarms** ---

frequency	Text/health	<code>moreStatus</code>	Frequency in Hz
attenuation	Text/health	<code>moreStatus</code>	attenuation
attenuation 2	Text/health	<code>moreStatus</code>	optional second attenuation
attenuation 3	Text/health	<code>moreStatus</code>	optional third attenuation

Table 1-91: Alarms (*Continued*)

Alarm name	Type	MIB point	Further details
control	Text/health	<code>moreStatus</code>	local or remote
intermediate freq	Text/health	<code>moreStatus</code>	intermediate frequency
mute	Text/health	<code>moreStatus</code>	muted or not
reference	Text/health	<code>moreStatus</code>	internal/external reference
polarization	Text/health	<code>moreStatus</code>	polarization (none, horizontal, vertical)
setup title	Text/health	<code>moreStatus</code>	Setup Title
slope	Text/health	<code>moreStatus</code>	Slope in dB
impedance	Text/health	<code>moreStatus</code>	50 ohm or 75 ohm

Table 1-92: Configurable parameters

Parameter	Description
<code>AlarmPath</code>	Used to set the Alarm prefix. Default: <code>PBI</code> . Could be replaced by <code>IRD</code> so as to have legacy plug-ins tree look-like.
<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed. Default: <code>1</code> .
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The <code>uniqueID</code> should be part of the URI.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling. Default: <code>public</code>
<code>pos15vThresh</code>	Threshold for +15V voltage supervisor. Default: <code>5V</code> The alarm +15V Supply rail becomes critical when the measured voltage is under the threshold.
<code>pos5vThresh</code>	Threshold for +5V voltage supervisor . Default: <code>2V</code> The alarms +5V Supply rail A and +5V Supply rail B become critical when the measured voltage is under the threshold.
<code>neg15vThresh</code>	Threshold for -15V voltage supervisor. Default: <code>5V</code> The alarm -15V Supply rail becomes critical when the measured voltage is above the threshold.

Plug-in Notes

- This plug-in is based on `generic.js`.

- All MIB points are static.
- There are two types of alarms, global alarms for the whole unit and specific converter alarms. Global alarms are provided by:
 - MIB point `moreStatus` gives several different alarms and status
 - MIB point `sumAlrm` gives an overall Alarm
 - MIB points `pos15rail`, `pos5Arail`, `pos5Brail` and `neg15rail` give a voltage supervisor alarm
- All alarms can be considered as health monitoring.

Note: In accordance with the MIB, some entries are optional. Consequently, if data is not provided for a GSM alarm, the alarms status will remain UNKNOWN forever and no text will be associated. Regular expressions are used to parse data from SNMP varbind.

MIBs Used

The plug-in is currently compliant with the MIB called MITEQ-172138. We use the RFC1213 MIB point `sysUpTime` to detect device reboot and loss of communication.

NSU1 160061



The Miteq 1:N New Switchover Unit (NSU) is designed to provide improved reliability for advanced satellite communications systems. The NSU consists of a Control Unit, Switch Modules and frequency converters. The Control Unit monitors the status of up to twelve primary frequency converters and one backup frequency converter. When a fault is detected on a primary frequency converter, the defective converter is automatically placed into standby and the backup converter is placed on line in place of the defective converter using the Switch Modules. The frequency converters can be prioritized so that critical communication channels have access to the backup converter on a prioritized basis.

Switchover from a defective primary converter to the backup converter is achieved by connecting the converters to a switch matrix. The defective converter is replaced by physically removing its input/output signal lines and connecting them to the backup converter via the switch matrix. This ensures continuous operation while the fault is corrected, or allows for routine maintenance without disrupting signal transmission.

See the following for device support details:

- ["Alarms"](#) on page 87
- ["Configurable parameters"](#) on page 89

Table 1-93: Alarms

Alarm name	Type	MIB point	Further details
<p>--- Converter alarms¹ ---</p> <p>cvalr MIB point gives Local oscillator alarm and Power supply alarm.</p> <p>mute and pol are text alarms that only provide information</p> <p>acvstat MIB point gives informations for Redundancy Chain status alarms and serial link status converter alarm.</p>			
Local Oscillator Alarm	Status/health	cvalr	<p>Local Oscillator Alarm²</p> <p>This alarm may occur if the specified converter is not installed. It also may happen if the converter cannot be selected with an SNMP set.</p>
Power Supply Alarm	Status/health	cvalr	<p>Power Supply Alarm²</p> <p>This alarm may occur if the specified converter is not installed. It also may occur if the converter cannot be selected with an SNMP set.</p>
Mute	Text/health	mute	Mute converter output for the converter selected by the most recent cvse1 setting. ³
Polarization	Text/health	pol	<p>Polarization setting for the converter selected by the most recent cvse1 setting.³</p> <p>Allowable settings:</p> <ul style="list-style-type: none"> • 0 - N/A • 1 - None • 2 - Horizontal • 3 - Vertical
Serial Link Status converter	StatusText/health	acvstat	<p>Converter serial link status indicator</p> <ul style="list-style-type: none"> • 0 = No Fault - NSU-Converter Serial Link enabled and communicating • 1 = Fault - NSU-Converter Serial Link enabled and not communicating • 2 = No Fault - NSU-Converter Serial Link disabled • - = No Fault - Chain position inactive
Redundancy chain status	StatusText/health	acvstat	<p>Redundancy chain status indicator</p> <ul style="list-style-type: none"> • 0 = No Fault - chain position active • 1 = Fault -chain position active (Fault reported normally) • 2 = Fault - chain position active both contacts open • 3 = Fault - chain position active both contacts closed • - = chain position inactive disconnected from redundancy chain • + = chain position inactive connected to redundancy chain

Table 1-93: Alarms (*Continued*)

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms --- These alarms are created by generic.js			
Device Communication	Status/health	sysUpTime (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status/health	sysUpTime (RFC1213)	Raise a minor condition based on the value of sysUpTime read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
--- Status alarms ---			
Control Mode	Text/health	status	Control mode <ul style="list-style-type: none"> 0 = Local control 1 = Remote control
Redundancy Mode	Status/health	status	Redundancy mode <ul style="list-style-type: none"> 0 = Manual 1 = Automatic
Redundancy Chain Position	Text/health	status	Chain position in standby <ul style="list-style-type: none"> 00 = Backup converter 01 = Primary converter 1 12 = Primary converter 12
Polarization	Text/health	status	Polarization switch position <ul style="list-style-type: none"> 0 = None 1 = Horizontal 2 = Vertical
Power Supply A	Status/health	status	Power Supply 'A' Alarm
Power Supply B	Status/health	status	Power Supply 'B' Alarm
Converter bus fault	Status/health	status	Converter bus fault
Converter Contact fault	Status/health	status	Converter Contact fault
Switch Module fault	Status/health	status	Switch Module fault
Switch Module Bus fault	Status/health	status	Switch Module Bus fault
write community	Status/health	writeCommunity	Check the write community defined in the device correspond to the configured one. This is important as the plug-in performs SNMP SET operations.

1. The switchover can monitor up to 12 converters + 1 backup.
2. This alarm can be set to UNKNOWN if cvalr data does not match the pattern ?abcdef.
3. This alarm can be set to UNKNOWN if converter cannot be selected with an SNMP set.

Table 1-94: Configurable parameters

Parameter	Description
<code>AlarmPath</code>	Used to set the Alarm prefix. Default value: <code>PBI</code> Could be replaced by <code>IRD</code> to have legacy plug-ins tree look-like.
<code>pollInterval</code>	Poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed. Default: <code>1</code>
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The <code>uniqueID</code> should be part of the URI.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling. Default value: <code>public</code>
<code>writeCommunity</code>	SNMP write community string. Use to set SNMP variable. Default value: <code>private</code>
<code>nbConverter</code>	Number of converter to monitor. By default, monitor all converters (12 + 1 backup)
<code>cvSelWaitTime</code>	Defines the number of milliseconds to wait after the converter selection. Default: <code>200 ms</code>

MIBs Used

The plug-in is currently compliant with the MIB MITEQ-160061. The RFC1213 MIB point `sysUpTime` is used to detect device reboot and loss of communication.

Motorola

Table 1-95: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"APEX 1000"		SNMP – Motorola APEX	IC-SNMP-123
"CAP-1000"	4.30	SNMP – Motorola CAP-1000	IC-SNMP-134
"CP7600 (formerly Terayon CP7600)"			
"DM6400 CherryPicker (formerly Terayon DM6400)"		SNMP – Motorola DM 6400	IC-SNMP-175
"DSR-4410"		SNMP – Motorola DSR-4410	IC-SNMP-165
"DSR-4440"	6.02	SNMP – Motorola DSR-4440	IC-SNMP-238
"DSR-4460"	4.30	SNMP – Motorola DSR-4460	IC-SNMP-152
"DSR-4500X"		SNMP – Motorola DSR-4500X	IC-SNMP-022

Table 1-95: Ordering information (*Continued*)

Hardware	New in iControl version	GSM plug-in name	Order number
"DSR-4520X"		SNMP – Motorola DSR-4520X	IC-SNMP-017
"DSR-4530"		SNMP – Motorola DSR-4530	IC-SNMP-166
"DSR-4550"	4.40	SNMP – Motorola DSR-4550	IC-SNMP-196
"DSR-6000"		SNMP – Motorola DSR-6000	IC-SNMP-167
"DSR-6050"		SNMP – Motorola DSR-6050	IC-SNMP-117
"DSR-6100"	4.30	SNMP – Motorola DSR-6100	IC-SNMP-131
"DSR-6300"		SNMP – Motorola DSR-6300	IC-SNMP-168
"MBT 5000 System"		SNMP – Motorola MBT5000	IC-SNMP-008
"NE-Series AVC Network Encoder"		SNMP – Motorola NE Encoder	IC-SNMP-160
"NE-2000 Network Encryptor"	4.10	SNMP – Motorola NE2000	IC-SNMP-160
"SE-6000"	4.11	SNMP – Motorola DSR-4530	IC-SNMP-084
"OM-1000 Modulator"		SNMP – Motorola DSR-4530	IC-SNMP-043
"SE-Encoder"		SNMP – Motorola DSR-4530	IC-SNMP-006
"SE-2000 Encoder"		SNMP – Motorola DSR-4530	IC-SNMP-006
"SE-4000/4010"		SNMP – Motorola DSR-4530	IC-SNMP-084
"SE-5000/5010"		SNMP – Motorola DSR-4530	IC-SNMP-084
"SmartStream Encryptor/Modulator (SEM)"		SNMP – Motorola DSR-4530	IC-SNMP-009
"SmartStream Transport Multiplexer (TMX 2010)"		SNMP – Motorola DSR-4530	IC-SNMP-007

APEX 1000

CAP-1000

The Motorola CAP-1000 CherryPicker Application Platform is an advanced IP-centric multiplexer and encoder used to multiplex several SD/HD services encoded in MPEG-2 and MPEG-4 formats.

CP7600 (*formerly Terayon CP7600*)

Multichannel decoder.

DM6400 CherryPicker (*formerly Terayon DM6400*)

The DM6400 is part of the Motorola CherryPicker® line of digital video processing systems for networking, distributing and processing both standard definition (SD) and high definition

(HD) services. It provides various digital video applications including grooming of custom channel lineups, rate shaping and statistical remultiplexing, and localized digital ad insertion.

DSR-4410

The Motorola DSR-4410 is a 1RU commercial satellite receiver that can output either NTSC or PAL video formats, automatically matching a programmer's video format. Variable front-end and bypass capabilities make it suited for network conversion from analog to digital. Full VBI reinsertion on lines 10 - 22 for SID/AMOL I & II and NABTS is standard on the DSR-4410, which is equipped with DVB-ASI input and output.

DSR-4440



This device is a Commercial Integrated Receiver/Decoder (IRD). It is a Multi-Format Digital Satellite Receiver for Cable Programmers and Operators.

See the following for device support details:

- ["Health monitoring alarms"](#) on page 91
- ["Service alarms"](#) on page 92
- ["Configurable parameters"](#) on page 93

Table 1-96: Health monitoring alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
DC Board Status	Status	<code>dcBoardStatus</code> (DSR4440)	Poller	Indicates the status of DC board i.e. Active or Not Responding
Device Communication	Status	<code>sysUpTime</code> (RFC1213)	Poller	Device communication alarm set by receiving a successful/failed event in the poller
Device Restart	Status	<code>sysUpTime</code> (RFC1213)	Poller	Device power cycle alarm. Status determined comparing subsequent polling of the system up time variable
Flash Available	Status/Text	<code>flashAvail</code> (DSR4440)	Poller	Gives the size of the free Flash left, expressed in B(Bytes) that is available for the operating system, the threshold is defined based on the 20% of the total size of the flash

Table 1-96: Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Polling or trap?	Further details
Flash Total	Text	<code>flashTotal</code> (DSR4440)	Poller	Gives the total size of the Flash expressed in B(Bytes) that is available for the operating system
Memory Available	Status/Text	<code>memAvail</code> (DSR4440)	Poller	Gives the size of the free heap memory left, expressed in B(Bytes) that is available for the operating system, the threshold is defined based on the 20% of the total size of the memory
Memory Total	Text	<code>memTotal</code> (DSR4440)	Poller	Gives the total size of the heap memory expressed in B(Bytes) that is available for the operating system
System Uptime	Text	<code>sysUpTime</code> (RFC1213)	Poller	System up time alarm, this is a default health monitoring alarm when you use the generic.js to create a new custom driver

Table 1-97: Service alarms

Alarm name	Type	MIB point	Polling or trap?	Further details
--- LED status alarms ---				
Authorized	Status/Text	<code>authorizedLED</code>	Fast poller	The Authorized LED is on (illuminated) when the Signal LED is on and the programmer has transmitted the access messages to allow the unit to decrypt the signal
Relay 1	Status/Text	<code>relay1LED</code>	Fast poller	The relay1 LED is on (illuminated) when relay1 is closed
Relay 2	Status/Text	<code>relay2LED</code>	Fast poller	The relay2 LED is on (illuminated) when relay2 is closed
Relay 3	Status/Text	<code>relay3LED</code>	Fast poller	The relay3 LED is on (illuminated) when relay3 is closed
Signal	Status	<code>signalLED</code>	Fast poller	The Signal LED is on (illuminated) when the unit recognizes the signal as a DigiCipher II signal
--- Signal lock alarms ---				
Primary Audio Lock	Status	<code>primaryAudioLock</code>	Fast poller	Verifies if the Primary Audio is locked
Secondary Audio Lock	Status	<code>secondaryAudioLock</code>	Fast poller	Verifies if the Secondary Audio is locked
video Lock	Status	<code>videoLock</code>	Fast poller	Verifies if the Video is locked

Table 1-97: Service alarms (Continued)

Alarm name	Type	MIB point	Polling or trap?	Further details
--- Signal status alarms ---				
Acquisition State	Status/Text	<code>acquisitionState</code>	Fast poller	Displays the acquisition state for the active signal
Authorization State	Status/Text	<code>authorizationState</code>	Fast poller	Displays the authorization state for viewing the current signal (31 states)
Encryption Mode	Status/Text	<code>encryptionMode</code>	Fast poller	Displays the encryption mode of the current signal (5 modes)
Signal Quality	Status/Text	<code>signalQuality</code>	Fast poller	Displays the RF quality level of the current signal, the threshold is currently set to 30 which can also be passed as a parameter
Signal Power	Status/Text	<code>signalPower</code>	Fast poller	Displays the RF power level of the current signal, the threshold is currently set to -45 which can also be passed as a parameter
Signal to Noise Ratio	Status/Text	<code>ebNo</code>	Fast poller	Displays the signal to noise ratio of the current signal, the threshold is currently set to 10 which can also be passed as a parameter

Table 1-98: Configurable parameters

Parameter	Description
<code>pollInterval</code>	Fast poller interval in seconds. Overwrite the default interval of 20 seconds.
<code>retries</code>	If an SNMP request times out, this defines the number of retries to be performed. Default is 1.
<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.
<code>uniqueID</code>	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plug-in of the same type. The <code>uniqueID</code> should be part of the URI.
<code>readCommunity</code>	SNMP read community string. Use for SNMP polling.
<code>sqTrsh</code>	By setting this parameter we can define the Signal Quality threshold value.
<code>spTrsh</code>	By setting this parameter we can define the Signal Power threshold value.
<code>snrTrsh</code>	By setting this parameter we can define the Signal to Noise Ratio threshold value.
<code>trshLevelFla</code>	By setting this parameter we can define the threshold level for the available flash (a number from 0 to 1).
<code>trshLevelMem</code>	By setting this parameter we can define the threshold level for the available memory (a number from 0 to 1).

Table 1-98: Configurable parameters (*Continued*)

Parameter	Description
<code>signalForcedSeverityText</code>	Text indicating the forced severity for service alarms. Possible values: CRITICAL, MAJOR, MINOR
<code>healthForcedSeverityText</code>	Text indicating the forced severity for health alarms. Possible values: CRITICAL, MAJOR, MINOR

DSR-4460

The DSR-4460 decodes an MPEG-2 or MPEG-4, HD or SD service and delivers superior video and audio performance via HD/SD-SDI output or analog/composite video output.

DSR-4500X

The Motorola DSR-4500X is an advanced commercial integrated receiver/decoder (IRD). Along with standard audio and video ports, this professional satellite receiver has connections to deliver data services, MPEG-2 transport streams and headend signaling.

DSR-4520X

DigiCipher® II integrated receiver/decoder (IRD) — digital satellite receiver.

DSR-4530

DSR-4550

DigiCipher® II commercial integrated receiver/decoder (IRD) — digital satellite receiver for cable programmers and operators.

DSR-6000

DSR-6050

DSR-6100

DSR-6100 integrated receiver/decoder (IRD) — digital satellite receiver, decoder. The DSR-6100 is used to receive several HD services that are compressed using MPEG-2 and MPEG-4 encoding.

DSR-6300

MBT 5000 System

NE-Series AVC Network Encoder

NE-2000 Network Encryptor

The Motorola NE2000 is a *Network Encryptor* used for MediaCipher encryption of MPEG-2 MPTS or SPTS.

SE-6000

The SE-6000 encoder, designed to meet future 1080p resolutions, accepts baseband SD and HD video, as well as pre-compressed MPEG-4 and MPEG-2 streams to act as both a high performance encoder and transcoder for satellite, cable and Internet Protocol Television (IPTV) applications.

OM-1000 Modulator

The Motorola OM-1000 is an MPEG-2/digital out-of-band multiplexer modulator used to transmit MPEG-2 data streams to cable terminals.

SE-Encoder

SE-2000 Encoder

The Motorola SE-2000 digital video encoder provides video compression technology in a compact chassis for cable headend, small broadcast and high bandwidth contribution applications. The SE-2000 accepts either analog composite or digital CCIR-601 video and performs MPEG-2 compression.

SE-1010/2000/2000IP

The Motorola SE-1010 digital video encoder provides video compression technology in a compact chassis for cable headend and small broadcast applications. The SE-1010 digital encoder accepts either analog composite or digital CCIR-601 video and performs MPEG-2 compression and stream splicing. The video compression data rate can be controlled through the Ethernet port via SNMP.

The Motorola SE-2000 digital video encoder provides video compression technology in a compact chassis for cable headend, small broadcast and high bandwidth contribution applications. The SE-2000 accepts either analog composite or digital CCIR-601 video and performs MPEG-2 compression.

SE-4000/4010

The SE-4000 SD video encoder delivers AVC compressed MPEG-4 content via existing MPEG-2 transport streams using IP or optional ASI. This encoder is the result of a partnership between Motorola and Modulus Video Inc.

SE-5000/5010

The SE-5000 HD video encoder delivers AVC compressed MPEG-4 content via existing MPEG-2 transport streams using IP or optional ASI. This encoder is the result of a partnership between Motorola and Modulus Video Inc.

SmartStream Encryptor/Modulator (SEM)

The Motorola SmartStream interactive digital cable system consists of an integrated set of high performance stream-processing elements for the deployment of advanced services like VOD and digital ad insertion. The SmartStream system adds functionality to existing digital cable systems with four product families: SmartStream Encryptor/Modulator (SEM), SmartStream Resource Manger (SRM), SmartStream Device Manager (SDM) and SmartStream Transcoder Multiplexer (TMX).

SmartStream Encryptor/Modulator provides the ability to encrypt a large number of services across 8 separate 64 or 256 QAM cable channels. The SEM supports both GigE and ASI transport technology, and can deliver hundreds of individual streams directly to subscribers. SEM encryption is part of Motorola's MediaCipher™ conditional access system.

SmartStream Transport Multiplexer (TMX 2010)

The SmartStream interactive digital cable system consists of an integrated set of high performance stream-processing elements necessary for the successful deployment of advanced services like VOD and digital ad insertion. The SmartStream system adds functionality to existing digital cable systems and adds four new product families: SmartStream Encryptor/Modulator (SEM), SmartStream Resource Manger (SRM), SmartStream Device Manager (SDM) and SmartStream Transcoder Multiplexer (TMX).

The TMX 2010 Transport Multiplexer provides MPEG-2 service multiplexing, grooming, video bitrate transcoding, video splicing, IP data encapsulation, and encoder management for digital broadcast, satellite and cable distribution.

Net Insight

Table 1-99: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Nimbra680 Network Adaptor"		SNMP – Net Insight Nimbra 6800	IC-SNMP-163

Nimbra680 Network Adaptor

The Nimbra 600 series of Media Switch Routers includes an array of carrier-class network switches with integrated media adapters and codecs for transport and processing of professional video, audio and data, with guaranteed quality of service regardless of network load or topology.

Network Electronics Inc.

Please see "[Nevion \(Network Electronics Inc.\)](#)", on page 97.

Nevion (Network Electronics Inc.)

Table 1-100: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AAV-HD-DMUX-R HD-SDI Audio De-embedder (analog/digital audio)"	6.03	SNMP – Nevion card aav hd-dmux	IC-SNMP-252
"AAV-HD-XMUX-T/R HD-SDI Audio De-embedder (analog/digital audio)"	6.03	SNMP – Nevion card aav hd-xmux	IC-SNMP-253
"GYDA-SC Multi-frame System Controller"		SNMP – Nevion GYDA	IC-SNMP-099
"Multicon Nwork"		SNMP – Nevion	IC-SNMP-164
--- Frames ---			
"Nevion Frame"	6.03		

Nevion Frame

See the following for device support details:

- "[Nevion Frame alarms](#)" on page 98
- "[Configurable parameters](#)" on page 98
- "[MIBs used](#)" on page 99

Note: The listed alarm names, paths, and URIs in the tables, below, follow a naming strategy based on several assumptions. For more details, see "[Alarm Names, Paths, and URIs](#)", on page 99.

Table 1-101: Nevion Frame alarms

Alarm name	MIB point	Type	Alarm URI	Description
--- Signal alarms ---				
Integrity	monitorAlarmStatus	Status	\$(alarmPath)/Signal/integrity	Gives indication about the current signal type
--- Health monitoring alarms ---				
status_\$(elem)	voltageAlarmStatus	Status	\$(alarmPath)/Health Monitoring/voltage/status_Rack\$(RackNum)_Pos\$(PosNum)_Elem\$(ElemNum)	Shows the status of the voltage.
status_\$(elem)	temperatureAlarmStatus	Status	\$(alarmPath)/Health Monitoring/temperature/status_Rack\$(RackNum)_Pos\$(PosNum)_Elem\$(ElemNum)	Shows the status of the temperature.
status_\$(elem)	laserAlarmStatus	Status	\$(alarmPath)/Health Monitoring/laser/status_Rack\$(RackNum)_Pos\$(PosNum)_Elem\$(ElemNum)	Shows the status of the laser.
status_\$(elem)	optInputAlarmStatus	Status	\$(alarmPath)/Health Monitoring/optInput/status_Rack\$(RackNum)_Pos\$(PosNum)_Elem\$(ElemNum)	Shows the status of the optical input.
status_\$(group)	embedderAlarmStatus	Status	\$(alarmPath)/Health Monitoring/embedder/\$(embedderType)/status_Rack\$(RackNum)_Pos\$(PosNum)_Elem\$(ElemNum)	Shows the status of the embedder. ¹
status_\$(elem)	audioBlockAlarmStatus	Status	\$(alarmPath)/Health Monitoring/audioBlock/\$(AudioBlockType)/status_Rack\$(RackNum)_Pos\$(PosNum)_Elem\$(ElemNum)	Shows the status of the audioblock. ²

1. **embedderType** can be *embedder* or *deembeder*.
2. **AudioBlockType** can be *input*, *output* or *internal*.

Table 1-102: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm path	alarmPath	Defines the base alarm path.	"SNMP/NEVION_FRAME/\$(HOST_IP)/"
Poll interval	pollInterval	Poller interval in seconds.	
Retries	retries	If an SNMP request timeout, this defines the number of retries to be performed.	1

Table 1-102: Configurable parameters (*Continued*)

Parameter name	Parameter object key	Description	Default value
Timeout	<code>timeout</code>	Delay in seconds before declaring a timeout in the current SNMP request.	
Unique identifier	<code>uniqueID</code>	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. ¹	

1. The unique ID should be part of the URI.

Table 1-103: MIBs used

MIB	MIB file name
NWORK-MIB	NWORK-MIB.mib

Alarm Names, Paths, and URIs

Each alarm URI should be unique. Each alarm related to a given card should have the same path.

To configure a spreadsheet, you must have the following information:

- rack and position—for all cards
- group (between 1 and 4)—for embedder sub-modules
- format type (aes, aa)—for audioblock sub-modules

Note: To ensure traps are handled correctly, URI format should not be changed.

Sub-Module Element Number

Most sub-modules alarms are created using the sub-element number. Their URI will contain `_Elem$(ElemNum)`. For example:

```
snmp://NEVION_FRAME:10.12.170.126/voltageAlarmStatus_Rack0_Pos1_Elem0
```

Sub-modules with a Type

When a sub-module contains a type, the type appears in the path. There are currently only two sub-module types:

- Embedder can be *embedder* or *deembedder*
- AudioBlock can be *input*, *output* or *internal*

For example:

```
snmp://NEVION_FRAME:10.12.170.126/embedderAlarmStatus_Rack0_Pos1_Elem1
28
```

Sub-modules with a Group

Embedder sub-modules have a group property. When the alarm description includes a group (and not an embedder index), the group appears in the alarm name.

Note: In the URI, the element number remains (the element number cannot be replaced by the group since the traps do not provide any).

Example:

```
snmp://NEVION_FRAME:10.12.170.126/embedderAlarmStatus_Rack0_Pos1_Elem1  
28
```

AAV-HD-DMUX-R HD-SDI Audio De-embedder (analog/digital audio)

The AAV-HD-DMUX is a highly integrated multi-rate audio de-embedding module in the Flashlink range, offering de-embedding of audio into AES or analog audio from a digital HD or SD serial video signal. The module is featured with optional optical receiver enabling easy integration into any optical video network.

See the following for device support details:

- ["Alarms"](#) on page 100
- ["Configurable parameters"](#) on page 101
- ["MIBs used"](#) on page 101

Table 1-104: Alarms

Alarm name	Type	Polling or trap?	MIB point	Code to raise alarm	Description
Alarm count					
Status					
--- Health Monitoring > audioBlock > output ---					
status_0_aa					
status_1_aa					
status_2_aes					
status_3_aes					
status_4_aes					
status_5_aes					
--- Health Monitoring > embedder > deembedder ---					
status_128_group_1					
status_129_group_2					
status_130_group_3					
status_131_group_4					

Table 1-104: Alarms (Continued)

Alarm name	Type	Polling or trap?	MIB point	Code to raise alarm	Description
--- Health Monitoring > embedder > embedder ---					
status_0_group_0					
status_1_group_1					
status_2_group_2					
status_3_group_3					
--- Health Monitoring > optInput ---					
status_0					
--- Health Monitoring > voltage ---					
status_0					
status_1					
status_2					
status_3					
status_4					
--- Monitor ---					
signalIntegrity_0					

Table 1-105: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm Path	alarmPath	Defines the base alarm path.	"SNMP/NEVION_FRAME/(HOST_IP)/"
Poll Interval	pollInterval	Poller interval in seconds	
Retries	retries	Number of times to retry after a failed SNMP poll	1 retry
Timeout	timeout	Delay in seconds before declaring a timeout in the current SNMP request.	
Unique ID	uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.	

Table 1-106: MIBs used

MIB	MIB file name
Nwork MIB	NWORK-MIB.mib

AAV-HD-XMUX-T/R HD-SDI Audio De-embedder (analog/digital audio)

The AAV-HD-XMUX is a multi-rate highly integrated audio embedding module in the Flashlink range, offering simultaneous embedding and de-embedding of audio from a digital HD or SD serial video signal.

See the following for device support details:

- ["Alarms"](#) on page 102
- ["Configurable parameters"](#) on page 103
- ["MIBs used"](#) on page 103

Table 1-107: Alarms

Alarm name	Type	Polling or trap?	MIB point	Code to raise alarm	Description
Alarm count					
Status					
--- Health Monitoring > audioBlock > input ---					
status_0_aa					
status_1_aa					
status_2_aes					
status_3_aes					
--- Health Monitoring > audioBlock > output ---					
status_4_aes					
status_5_aes					
--- Health Monitoring > embedder > deembedder ---					
status_128_group_1					
status_129_group_2					
status_130_group_3					
status_131_group_4					
--- Health Monitoring > embedder > embedder ---					
status_0_group_0					
status_1_group_1					
status_2_group_2					
status_3_group_3					

Table 1-107: Alarms (Continued)

Alarm name	Type	Polling or trap?	MIB point	Code to raise alarm	Description
--- Health Monitoring > optInput ---					
status_0					
--- Health Monitoring > voltage ---					
status_0					
status_1					
status_2					
status_3					
status_4					
--- Monitor ---					
signalIntegrity_0					

Table 1-108: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm Path	alarmPath	Defines the base alarm path.	"SNMP/NEVION_FRAME/\$(HOST_IP)/"
Poll Interval	pollInterval	Poller interval in seconds	
Retries	retries	Number of times to retry after a failed SNMP poll	1 retry
Timeout	timeout	Delay in seconds before declaring a timeout in the current SNMP request.	
Unique ID	uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.	

Table 1-109: MIBs used

MIB	MIB file name
Nwork MIB	NWORK-MIB.mib

GYDA-SC Multi-frame System Controller

The GYDA System Controller is an advanced control and monitoring card for the Network Electronics flashlink® system. The card can control and monitor up to 8 flashlink frames (79 modules). It has a standard 10BASE-T Ethernet port, and supports SNMP. The controller module has four GPI inputs and a GPI open collector output.

Multicon Nwork

Multicon is the second generation system controller from Nevion replacing existing GYDA-SC, ETH-CON and Syscon products. Multicon is based on an open and distributed architecture and provides one platform to monitor and control both Flashlink and VikinX products. These features and a powerful third party plug-in interface allow for full control of the entire video transport chain.

PESA Switching Systems (QuStream Group)

Table 1-110: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Cheetah, Tiger, Jaguar, Cougar, Ocelot, Bobcat, and TDM3000 (SNM 35V3)"		SNMP – PESA SNM 35V3	IC-SNMP-086

Cheetah, Tiger, Jaguar, Cougar, Ocelot, Bobcat, and TDM3000 (SNM 35V3)

HD digital routing switchers and multi-rate routers, serial digital routing switchers, analog routing switchers, and large scale Time Division Multiplex (TDM) audio switchers.

Phoenix Broadband Technologies (PBT)

Table 1-111: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"ContactAgent GPI"		GPI PBT ContactAgent	IC-SNMP-056

ContactAgent GPI

The Phoenix Broadband Technologies PBT-CA1 is a general purpose status monitoring agent intended to monitor and control equipment that has “contact closure” interface points.

The PBT-CA1 has a general purpose I/O interface consisting of 8 digital inputs that can be monitored for external contact closures, 2 controllable relay contact outputs that can be used to remotely control external equipment, and an RS-485 port that can be programmed to interface with proprietary serial interfaces.

Pinnacle Data Systems Inc. (PDSI)

Table 1-112: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DS130"		SNMP – Pinnacle	IC-SNMP-003

DS130

The DS130 data storage system is an entry-level, carrier-grade data backup solution that provides a single, direct-cable connection to each fixed, internal peripheral.

Pro Broadband, Inc. (PBI)

Table 1-113: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"DCH-4000P MPEG-2 SD IRD and Processor"	6.02	SNMP – PBI DCH4000P Receiver	IC-SNMP-240

DCH-4000P MPEG-2 SD IRD and Processor



The DCH-4000P is a professional IRD with a variety of input combinations (including DVB over ASI, IP, QPSK, QAM, COFDM and DS3) and output (CVBS, SDI, ASI, DS3 and IP). An appropriate IP port equipped as an option supports DVB over IP applications. LAN control and monitoring are achieved with TCP/IP, SNMP and HDMS.

See the following for device support details:

- ["Health monitoring alarms"](#) on page 106
- ["Configurable parameters"](#) on page 108

Table 1-114: Health monitoring alarms

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms ---			
Device Communication	Status/health	sysUpTime (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.
Device Restart	Status/health	sysUpTime (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by pollinterval X retries.

--- Input DVBS alarms ---

All the following are elements related to signal input with type tuner DVBS. All those elements are displayed in a subfolder named 'Input DVBS2.'

Lock	Status/Signal	tunerLock	Tuner Lock
Packet Length	Text/Signal	tunerPacketLen	packet length: 188 or 204
Total Bitrate	Text/Signal	tunerTotalBitrate	total bit Rate size: from 0 to 100Mbps
Valid Bitrate	Text/Signal	tunerValidBitrate	valid Bit rate: from 0 to 100Mbps
Quality	Text/Signal	tunerQuality	tuner quality signal monitoring
Strength	Text/Signal	tunerStrength	tuner signal strength
Signal BER	Text/Signal	tunerBER	tuner signal BER
Carrier noise	Text/Signal	tunerCN	tuner carrier noise
Eb/No	Text/Signal	tunerEbNo	tuner Eb/No
Lnb Frequency	Text/Signal	lnbFrequency	LNB frequency
sat Frequency	Text/Signal	satFrequency	Tuner frequency or centre_frequency for the transmission expressed in MHz, its value range: from 950 MHz to 2150 MHz
symbol Rate	Text/Signal	symbolRate	Tuner symbol rate in symbols per second,its value range: from 0kb/s to 45000kb/s
lnb Voltage	Text/Signal	lnbVoltage	Tuner power, Option: 0v,13v,18v
lnb 22KHz	Text/Signal	lnb22KHz	Tuner 22 KHz, option: off or on
Tuner type selected	Text/Signal	typeSel	tuner type

--- Input ASI alarms ---

All the following are elements related to signal input with type ASI. All those elements are displayed in a subfolder named 'Input ASI.'

Lock	Status/Signal	asiLock	ASI Lock
Packet Length	Text/Signal	asiPacketLen	packet length: 188 or 204
Total Bitrate	Text/Signal	asiTotalBitrate	total bit Rate size: from 0 to 100Mbps
Valid Bitrate	Text/Signal	asiValidBitrate	valid Bit rate: from 0 to 100Mbps

Table 1-114: Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Further details
--- Input IP alarms --- <i>All the following are elements related to signal input with type IP. All those elements are displayed in a subfolder named 'Input IP'.</i>			
Lock	Status/Signal	<code>ethernetInLock</code>	Ethernet Lock
Packet Length	Text/Signal	<code>ethernetInPacketLen</code>	packet length: 188 or 204
Total Bitrate	Text/Signal	<code>ethernetInTotalBitrate</code>	total bit Rate size: from 0 to 100Mbps
linkStatus	StatusText/Signal	<code>linkStatus</code>	Ethernet link status (none, 10M, 100M). Status is set to NORMAL if link is 10M or 100M. If none, or unknown, status is set to CRITICAL .
--- Output ASI alarms: Out 1 --- <i>All the following are elements related to signal output with type ASI.</i> <i>There are two output ports. The following is the set of alarms for Port 1.</i> <i>Subfolder: Output ASI/Out 1</i>			
Source	Text/Signal	<code>sourceSel1</code>	select source, qpsk:0, asi:1, ds3:2
Package Length	Text/Signal	<code>packageLength1</code>	package length, 188 or 204
--- Output ASI alarms: Out 2 --- <i>All the following are elements related to signal output with type ASI.</i> <i>There are two output ports. The following is the set of alarms for Port 2.</i> <i>Subfolder: Output ASI/Out 2</i>			
Source	Text/Signal	<code>sourceSel2</code>	select source, qpsk:0, asi:1, ds3:2
Package Length	Text/Signal	<code>packageLength2</code>	package length, 188 or 204
--- Output IP alarms --- <i>There is only one IP output port.</i>			
IP address	Text/Signal	<code>ipAddress</code>	Ethernet output ip address
Stream UDP port	Text/Signal	<code>streamUDPPort</code>	ethernet output stream UDP port
Multicast IP address	Text/Signal	<code>multicastIPAddress</code>	ethernet output multicast IP address
TS packets per UDP	Text/Signal	<code>tsPacketPerUDP</code>	ethernet output TS packets per UDP
TTL	Text/Signal	<code>ttl</code>	ethernet output ttl
External board netmask	Text/Signal	<code>sourceNetmask</code>	External board netmask
External board gateway	Text/Signal	<code>sourceGateway</code>	External board gateway
External board mac	Text/Signal	<code>sourceMac</code>	External board mac
Multicast port	Text/Signal	<code>multiUDPPort</code>	Multicast port
Protocol	Text/Signal	<code>protocol</code>	Protocol : udp or trp
Type service	Text/Signal	<code>typeService</code>	normal, min delay, max throughput, max reliability, min monetary cost

Table 1-114: Health monitoring alarms (*Continued*)

Alarm name	Type	MIB point	Further details
Source	StatusText/Signal	source	Text can be asi, tuner, ds3, CI. Status is NORMAL if source value correspond to the parameter "inputType". If source is unknown or does not match, status is set to CRITICAL .
Mode	Text/Signal	mode	DVB, IPTV
Max Channel	Text/Signal	maxChannel	when mode is IPTV, hardware sustain max channel
Current MaxChannel	Text/Signal	curMaxChannel	when mode is IPTV, device can output channel number most currently
Channel Input	Text/Signal	channelInput	when mode is IPTV, input channel number currently
MulticastValues	Text/Signal	multicastValues	when mode is IPTV, the value of multicast
Gateway Mac address	Text/Signal	gatewayMac	gateway mac address
HighTargetMac	Text/Signal	highTargetMac	when mode is IPTV, it denote all multicast channel's target mac, only save high 32bit, one channel occupy 4 bytes
LowTargetMac	Text/Signal	lowTargetMac	when mode is IPTV, it denote all multicast channel's target mac, only save target mac's low 16bit, one channel occupy 4 bytes, latter 2 bytes is effective
TargetMac4Dvb	Text/Signal	targetMac4Dvb	when mode is DVB, the target mac address

Table 1-115: Configurable parameters

Parameter	Description
AlarmPath	Used to set the Alarm prefix. Default value: PBI Could be replaced by IRD so as to have legacy plug-ins tree look-like.
pollInterval	Poller interval in seconds. Overwrite the default interval of 20 seconds.
retries	If an SNMP request timeout, this defines the number of retries to be performed. Default value: 1 .
timeout	Delay in seconds before declaring a timeout in the current SNMP request.
uniqueID	An extra identifier to be assigned to the plug-in to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.
readCommunity	SNMP read community string. Use for SNMP polling. Default value: public
inputType	Defines the signal input type. Value can be DVB_S , ASI or IP Default value: DVB_S
outputType	Defines the signal output type. Value can be ASI or IP Default value: IP

QLogic

Table 1-116: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"SAN Fiber Channel Switches"		SNMP – QLogic SAN Fiber Channel Switches	IC-SNMP-202

SAN Fiber Channel Switches

The QLogic SAN Fiber Channel Switch family comprise a series of Fibre Channel (FC) protocol switches for use as the backbone of storage area networks (SANs).

Quest Controls Inc.

Table 1-117: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"TELSEC RM/WM-Series Controller"		SNMP – Quest Telsec WM	IC-SNMP-149

TELSEC RM/WM-Series Controller

The TELSEC RM/WM-series controller is used to monitor/control environmental and access control functions as well as equipment alarming at a remote site.

RGB Networks

Table 1-118: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"BNP Broadcast Network Processor"	4.40	SNMP – RGB Networks Broadcast Network Processor	IC-SNMP-191
"MMC Modular Media Converter"	4.40	SNMP – RGB Networks Modular Media Converter	IC-SNMP-192
"SEP 48 Simulcast Edge Processor"		SNMP – RGB SEP 48	IC-SNMP-095

BNP Broadcast Network Processor

The BNP broadcast network processor family of devices perform video processing including grooming, statistical multiplexing, transrating, digital program insertion, emergency alert and operator messaging services, as well as digital graphic overlays.

MMC Modular Media Converter

The MMC modular media converter performs high-density ASI-to-Gigabit Ethernet conversion, thereby facilitating the transition to Gigabit networks.

SEP 48 Simulcast Edge Processor

The SEP 48 Simulcast Edge Processor performs MPEG decoding, NTSC modulation and upconversion of multiple video streams for digital simulcast applications.

Riedel

Table 1-119: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Artist Intercom System"		SNMP – Riedel Artist	IC-SNMP-088

Artist Intercom System

Artist is a matrix platform for intercom and the distribution of analogue and digital audio and TCP/IP data signals. The system consists of a fibre-based network backbone providing a distributed masterless system architecture for live audio and intercom applications.

Rohde & Schwarz

Table 1-120: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"AEM100 Emission Multiplexer"	4.40	SNMP – Rohde and Schwarz Aem100	IC-SNMP-187
"Exciter"	4.40	SNMP – Rohde and Schwarz Exciter	IC-SNMP-186

AEM100 Emission Multiplexer

The AEM100 multiplexer enables network operators to expand existing ATSC transmitter networks for ATSC Mobile DTV.

Exciter

Exciter is a multistandard TV exciter, able to process digital and analog signals when operating in ATSC mode.

Ross Video Production Technology

Table 1-121: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"openGear Frame and Modules"	4.40	SNMP – Ross OpenGear	IC-SNMP-184

openGear Frame and Modules

openGear Frames, and their modules, are industry standard openGear terminal equipment.

Samsung

Table 1-122: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"ME-B Series Commercial Display Monitors"		SNMP – Samsung ME-B Series Monitor	IC-DR-015

ME-B Series Commercial Display Monitors

Samsung's ME-B series of display monitors delivers a high-resolution display and integrated TV tuner for content versatility and control through RS232C and RJ45 ports.

Screen Subtitling Systems Ltd.

Table 1-123: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Polistream Subtitling Product Family"		SNMP – Screen Subtitling	IC-SNMP-137

Polistream Subtitling Product Family

The *Polistream* family of products offers a full range of subtitling solutions including transmission and transcoding, branding and timeshifting, and monitoring and logging. The Polistream product range simplifies the control and management of subtitle and caption delivery by employing modular software and flexible processing platforms. Polistream manages the transmission for any mix of DVB, Teletext, closed caption, Imtext and open subtitles as well as other data including graphics.

SeaChange

Table 1-124: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MediaServer 1200 Multi-Channel SD/HD Video Server"		SNMP – Seachange MSV 1200 Media Server	IC-SNMP-203
"SPOT Ad Insertion System"		SNMP – Seachange SPOT	IC-SNMP-150

MediaServer 1200 Multi-Channel SD/HD Video Server

SPOT Ad Insertion System

The SeaChange Spot System is an automated solution for reliable advertising insertion at the lowest operational expense and highest quality. Using spots loaded through an encoding station and schedules provided from an ad traffic and billing system, the Spot System completes every task necessary for fulfillment without operator intervention.

BML Servers

Please see ["XOR Media \(formerly SeaChange \[Broadcast Division\]\)"](#), on page 128.

MCL Codec Servers

Please see ["XOR Media \(formerly SeaChange \[Broadcast Division\]\)"](#), on page 128.

VOD Server

Please see ["XOR Media \(formerly SeaChange \[Broadcast Division\]\)"](#), on page 128.

Sencore

Table 1-125: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MRD 3187B Receiver/Decoder"		SNMP – Sencore MRD3187B	IC-SNMP-118
"MRD 4400 Modular Receiver/Decoder"	6.03	SNMP – Sencore MRD4400	IC-SNMP-266

MRD 3187B Receiver/Decoder

The MRD 3187B is a modular, configurable receiver/decoder solution, consisting of a system base with a software package. The MRD 3187B supports applications by combining dual-channel processing capability with MPEG2, H.264, 4:2:0, 4:2:2, SD, and HD video decoding. The MRD 3187B also supports features such as DVB-CI and SCTE35/104 messaging support.

MRD 4400 Modular Receiver/Decoder



The MRD 4400 Receiver/ Decoder is an integrated receiver/decoder for distribution and monitoring applications. The 4400 supports decoding of SD or HD video, encoded as either MPEG-2 or H.264, as well as up to four audio services.

See the following for device support details:

- ["Alarms"](#) on page 113
- ["Configurable parameters"](#) on page 114
- ["MIBs used"](#) on page 115

Table 1-126: Alarms

Alarm name	Type	Description	URI format
Communication Status	Device	Indicates communication status with the device	{baseuri}commStatus
Device Reboot	Device	Indicates reboot status of the device	{baseuri}powerCycle
FanError	Device	Fan error	{baseuri}fantempFanError
Temperature	Device	Temperature readings in celsius	{baseuri}fantempTemp
Temperature error	Device	Temperature error	{baseuri}fantempTempError
MPEG IP address	Service	mpeg Receiver Group Ip	{baseuri}mpegIpRecvGroupIp
MPEG port number	Service	mpeg Receiver Destination Port	{baseuri}mpegIpRecvDestPort
audio channel 1 PID	Service	audio channel 1 decoder Pid	{baseuri}auddecPid1
audio channel 2 PID		audio channel 2 decoder Pid	{baseuri}auddecPid2
decoder Tuning Mode	Service	decoder Tuning Mode 1. unknown(1) 2. pidLocked(2) 3. priority(3) 4. auto(4) 5. noPsi(5)	{baseuri}decoderTuningMode
decoder Pcr Pid	Service	decoder Pcr Pid	{baseuri}decoderPcrPid
decoder Video Pid	Service	decoder Video Pid	{baseuri}decoderVideoPid

Table 1-126: Alarms (Continued)

Alarm name	Type	Description	URI format
VSB Channel	Service	VSB RF Channel number	{baseuri}VSBChannel
Audio channel 1 Pid Not Present	Service	Audio channel 1 Pid Not Present	{baseuri}selectedaudioAudioPidNotPresentCond1
Audio channel 2 Pid Not Present	Service	Audio channel 2 Pid Not Present	{baseuri}selectedaudioAudioPidNotPresentCond2
Audio channel 1 Not Decoding	Service	Audio channel 1 Not Decoding	{baseuri}audiosrvNotDecodingCond1
Audio channel 2 Not Decoding	Service	Audio channel 2 Not Decoding	{baseuri}audiosrvNotDecodingCond2
unit Input Error	Service	unit Input Error	{baseuri}unitInputError
No Services Detected	Service	No Services Detected	{baseuri}NoServicesDetected
Pcr Pid Not Present	Service	Pcr Pid Not Present	{baseuri}selectedservicePcrPidNotPresentCond
Service Not Found	Service	Service Not Found	{baseuri}serviceLockServiceNotFoundCond
Pcr Pid Not Present	Service	Pcr Pid Not Present	{baseuri}selectedservicePcrPidNotPresentCond
unit Alias	Device	unit Alias. Name given by the customer to this unit.	{baseuri}unitAlias
unit Model	Device	unit Model (MRD4400)	{baseuri}unitModel
unit Serial Num	Device	unit Serial Num ex(7022396 R21)	{baseuri}unitSerialNum
unitVersion	Device	firmware version	{baseuri}unitVersion
video Decode	Device	video Decoder error	{baseuri}videoDecode
Video format error	Service	Video format error	{baseuri}videooutputAutoVideoFormatCond
Video Pid Not Present	Service	Video Pid Not Present	{baseuri}selectedserviceVideoPidNotPresentCond
vsbin Rf Lock Lost Cond	Service	Rf Lock Lost	{baseuri}vsbinRfLockLostCond
vsbin Ts Sync Loss Cond	Service	Sync Loss	{baseuri}vsbinTsSyncLossCond

Table 1-127: Configurable parameters

Parameter name	Parameter object key	Description	Default value
Alarm Path	alarmPath	Path under which alarms are created in IC Navigator.	"GrassValley/K2_Summit (<IP>)"
Poll Interval	pollInterval	Period between repeated SNMP polls to the device	30 seconds

Table 1-127: Configurable parameters (*Continued*)

Parameter name	Parameter object key	Description	Default value
Retries	retries	Number of times to retry after a failed SNMP poll	1 retry
Timeout	timeout	Number of seconds to wait for a response before declaring SNMP poll failed	3 seconds
Read Community	readCommunity	SNMP read community string (password)	"public"
Write Community	writeCommunity	SNMP write community string (password)	"private"
Unique ID	uniqueID	Unique ID that will be embedded in alarm URI	""

Table 1-128: MIBs used

MIB	MIB file name
RFC 1213	RFC1213-MIB.mib
Sencore 4400 mib. service alarms	SENCORE-MRD4400-MIB
Sencore CSP mib. Health alarms	SENCORE-CSP-MIB

ServerTech

Table 1-129: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Switched CDU"			

Switched CDU

SkyStream

Please see ["Ericsson"](#), on page 39.

Snell

Table 1-130: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Snell Routers"		SNMP – Snell Router	IC-SNMP-027
"Snell IQ Modular Interfaces"		SNMP – Snell IQ	IC-SNMP-028

Snell Routers

A router control system supporting a variety of hardware and software control elements.

Snell IQ Modular Interfaces

The IQ Modular product line includes routers for HD/SD digital video and AES/EBU digital audio that can be controlled from a dedicated RCP, a card edge, a front panel or a PC running RollCall network management software. The routers can be interfaced to an external RCP using a GPI module.

RollCall is a PC application enabling remote configuration and control functionality for RollCall-enabled infrastructure hardware.

Softel

Please see ["Grass Valley"](#), on page 48.

Sony

Table 1-131: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"CART+"			
"9-pin VTR Control (serial control)"			

CART+

9-pin VTR Control (serial control)

Routers that enable control over a remotely controllable VCR or DDR with Sony protocol RS-422. Any 9-pin video device can be controlled by this interface. From your Visual Basic application it also can be used in Visual C, HTML or any other compiler.

SpectraLogic

Table 1-132: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"BOA over T380 Enterprise Tape Library"	6.02	SNMP – SpectraLogic BOA	IC-SNMP-245

BOA over T380 Enterprise Tape Library

The SpectraLink T380 Tape Library is a tape-based enterprise-level data storage system. Grass Valley supports BOA on the T380.

Statmon

Table 1-133: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Axess Remote Control (RC) System"	4.30	SNMP – Statmon Axess	IC-SNMP-141

Axess Remote Control (RC) System

Statmon's Axess software is designed to manage NOCs, remote sites and wide ranges of devices regardless of brand or technology. The Axess RC system is a network-based application that remotely monitors devices, networks and systems where automatic control and response is required.

Studer

Table 1-134: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Studer Route 6000"		SNMP – Studer Route 6000 Audio Routing System	IC-SNMP-204

Studer Route 6000

The Studer Route 6000 is a routing and signal processing system based on the SCore Live DSP core and comprehensive D21m I/O system. The Route 6000 system can accommodate up to 1728x1728 inputs and outputs.

Sumavision Technologies, Inc.

Table 1-135: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"EMR-D8020"	6.02	SNMP – Sumavision_EMRD8020 IRD	IC-SNMP-239

EMR-D8020



The EMR-D8020 is a stand-alone device, designed to fulfill the market demands of decoding head-end programs and receiving satellites. The EMR-D8020 supports stream inputs including DVB-S/S2, ASI, IP and so on, and output support ASI and TS over IP. In addition the decoding output option has HD-SDI, CVBS, YPbPr, HDMI, Analog Audio, AES/EBU Audio and the decoding input function supports FRAME_SYNC.

See the following for device support details:

- ["Alarms"](#) on page 118
- ["Configurable parameters"](#) on page 121

Table 1-136: Alarms

Alarm name	Type	MIB point	Further details
--- Health monitoring alarms ---			
Device Communication	Status/health	<code>sysUpTime</code> (RFC1213)	Raise a critical condition if the device stops responding to polling for a time period defined by <code>pollInterval X</code> retries.
Device Restart	Status/health	<code>sysUpTime</code> (RFC1213)	Raise a minor condition based on the value of <code>sysUpTime</code> read is smaller by at least 60 seconds compared to last reading. The value increase by 100 every second.
--- Input DVBS2 alarms ---			
<i>All the following are elements related to signal input with type tuner DVBS2. All those elements are display in a subfolder named 'Input DVBS2'.</i>			
LockStatus	StatusText/Signal	<code>dvbs2InLockStatus</code>	DVB-S/S2 Input Status. "unlock" (Critical error) or "lock" (nominal case)
System Bitrate	Text/Signal	<code>systemBitrate</code>	System Bitrate Of DVBS/S2
Valid Bitrate	Text/Signal	<code>validBitrate</code>	Valid Bitrate Of DVBS/S2
Packet Length	Text/Signal	<code>packetLength</code>	Packet Length Of DVBS/S2
Signal Strength	StatusText/Signal	<code>signalStrength</code>	Strength Of Signal. If signal strength is inferior than <code>LBandLevelThreshold</code> param, or unknown, then the status is set to <code>CRITICAL</code> .
ber	Text/Signal	<code>ber</code>	BER Of Signal
snr	Text/Signal	<code>snr</code>	SNR Of Signal

Table 1-136: Alarms (Continued)

Alarm name	Type	MIB point	Further details
DownLink Frequency	Text/Signal	downlinkFreq	DownLink Freq Of Signal. Range (0..100000)
Local Frequency	Text/Signal	localFreq	Local Freq Of Signal. Range (0..100000)
Symbol Rate	Text/Signal	symbolRate	Symbol Rate Of Signal. Range (1..999999)
Standard	Text/Signal	standard	Mode Of DVBS/S2. Can be "dvb-s" or "dvb-s2"
Polarize	Text/Signal	polarize	Polarize Of Signal. Can be "horizontal", "vertical" or "off"
Inb 22khz	StatusText/Signal	lnb22khz	LNB 22kHz Of Signal. "on" or "off".
Signal Status	StatusText/Signal	signalStatusOutput	"Print Choose Of Output Status""on" or "off".
Signal Monitor	StatusText/Signal	signalMonitor	Signal Monitor. "on" or "off".
Block Stream	StatusText/Signal	blockStream	Block Stream. "on" or "off".
Signal Level Threshold	Text/Signal	sigalLevelThreshold	SignalLevel Threshold. Range (1..10)
Alarm Enable	StatusText/Signal	alarmEnable	DVBS/S2 alarm OnOff. "on" or "off".

--- Input ASI alarms ---

All the following are elements related to signal input with type ASI. All those elements display in a subfolder named 'Input ASI'.

LockStatus	StatusText/Signal	asiInLockStatus	ASI Input Status. "unlock" (Critical error) or "lock" (nominal case).
System Bitrate	Text/Signal	asiInSystemBitrate	System Bitrate
Valid Bitrate	Text/Signal	asiInValidBitrate	Valid Bitrate
Packet Length	Text/Signal	asiInPacketLength	Packet Length. "packet188" or "packet204"
Input Enable	StatusText/Signal	asiInEnable	Input OnOff. "on" or "off".
Input alarm enable	StatusText/Signal	asiInAlarmEnable	Alarm OnOff. "on" or "off".

--- Input IP alarms ---

All the following are elements related to signal input with type IP. All those elements are displayed in a subfolder named 'Input IP'.

LockStatus	StatusText/Signal	gbeInLockStatus	IP Input Status. "unlock" (Critical error) or "lock" (nominal case).
System Bitrate	Text/Signal	gbeInSystemBitrate	GBE System Bitrate
Valid Bitrate	Text/Signal	gbeInValidBitrate	GBE Valid Bitrate
Packet Length	Text/Signal	gbeInPacketLength	GBE Packet Length. "packet188" or "packet204"
Input IP	Text/Signal	gbeInIP	Receive Ip
Input Port	Text/Signal	gbeInPort	Receive Port.(0~65535)
Reference Bitrate Enable	StatusText/Signal	gbeInRefBitrateEnable	Reference bitrate enable. "on" or "off".

Table 1-136: Alarms (Continued)

Alarm name	Type	MIB point	Further details
Reference Bitrate	Text/Signal	gbeInRefBitrate	Reference bitrate value.(0~200000000)
Alarm Enable	StatusText/Signal	gbeInAlarmEnable	Alarm OnOff of GBE input. "on" or "off".
Protocol	Text/Signal	gbeInProtocol	Protocol of GBE receive. "udp" or "rtp".

--- **Output ASI alarms: Out 1** ---

All the following are elements related to signal output with type ASI.

There are two output ports. The following is the set of alarms for **Port 1**.

Subfolder: Output ASI/Out 1

System Bitrate	Text/Signal	asiOut1SystemBitrate	ASI port1 out System Bitrate
Valid Bitrate	Text/Signal	asiOut1ValidBitrate	ASI port1 Valid Bitrate
Stream source	Text/Signal	asiOut1Source	Stream source of ASI por1 out. Can be "asi", "dvb-s2", "ds3", "gbe", "descrambled"
alarm OnOff	StatusText/Signal	asiOut1AlarmEnable	ASI port1 out alarm OnOff. "on" or "off".

--- **Output ASI alarms: Out 2** ---

All the following are elements related to signal output with type ASI.

There are two output ports. The following is the set of alarms for **Port 2**.

Subfolder: Output ASI/Out 2

System Bitrate	Text/Signal	asiOut2SystemBitrate	ASI port2 out System Bitrate
Valid Bitrate	Text/Signal	asiOut2ValidBitrate	ASI port2 Valid Bitrate
Stream source	Text/Signal	asiOut2Source	Stream source of ASI por2 out. Can be "asi", "dvb-s2", "ds3", "gbe", "descrambled"
alarm OnOff	StatusText/Signal	asiOut2AlarmEnable	ASI port2 out alarm OnOff. "on" or "off".

--- **Output IP: Global Ethernet alarms** ---

Ethernet Link Status	status/Signal	gbeLinkStatus	Link Status. Set to NORMAL if variable equals "Link up".
Speed Duplex	Text/Signal	gbeStatusSpeedDuplex	Status Of Speed Duplex

--- **Output IP: Output port 1 alarms** ---

System Bitrate	Text/Signal	gbeOut1SystemBitrate	GBE port1 out System Bitrate
Valid Bitrate	Text/Signal	gbeOut1ValidBitrate	GBE port1 Valid Bitrate
Stream source	Text/Signal	gbeOut1Source	Stream source of GBE por1 out. Can be "asi", "dvb-s2", "ds3", "gbe", "descrambled"
Dest IP	Text/Signal	gbeOut1DestIP	Dest IP of GBE port1 out.
Dest port	Text/Signal	gbeOut1DestPort	Destport of GBE port1 out.(0~65535)
TTL	Text/Signal	gbeOut1TTL	TTL Of GBE out port1 out.(1~255)
alarm OnOff	StatusText/Signal	gbeOut1AlarmEnable	Alarm OnOff of GBE port1 out. "on" or "off".

Table 1-136: Alarms (*Continued*)

Alarm name	Type	MIB point	Further details
--- Output IP: Output port 2 alarms ---			
System Bitrate	Text/Signal	gbeOut2SystemBitrate	GBE port2 out System Bitrate
Valid Bitrate	Text/Signal	gbeOut2ValidBitrate	GBE port2 Valid Bitrate
Stream source	Text/Signal	gbeOut2Source	Stream source of GBE port2 out. Can be "asi", "dvb-s-s2", "ds3", "gbe", "descrambled"
Dest IP	Text/Signal	gbeOut2DestIP	Dest IP of GBE port2 out.
Dest port	Text/Signal	gbeOut2DestPort	Destport of GBE port2 out.(0~65535)
TTL	Text/Signal	gbeOut2TTL	TTL Of GBE out port2 out.(1~255)
alarm OnOff	Status/text/Signal	gbeOut2AlarmEnable	Alarm OnOff of GBE port2 out. "on" or "off".

Table 1-137: Configurable parameters

Parameter	Description
alarmPath	Used to set the Alarm prefix. Default value: Sumavision Could be replaced by IRD so as to have legacy plug-ins tree look-like.
pollInterval	Poller interval in seconds. Overwrites the default interval of 20 seconds.
retries	If an SNMP request times out, this defines the number of retries to be performed. Default: 1
timeout	Delay in seconds before declaring a timeout in the current SNMP request.
uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of URI.
readCommunity	SNMP read community string. Use for SNMP polling. Default value: public
inputType	Defines the signal input type. Value can be DVB_S2 , ASI or IP Default value is DVB_S2
outputType	Defines the signal output type. Value can be ASI or IP Default value: IP
LBandLevelThreshold	Defines the threshold for the signal strength to be declared in alarm or OK. Default value: -45db

Tampa Microwave

Please see "[Thales Defense & Security, Inc.](#)"; on page 126.

Tandberg Television

Please see ["Ericsson"](#), on page 39.

Tektronix

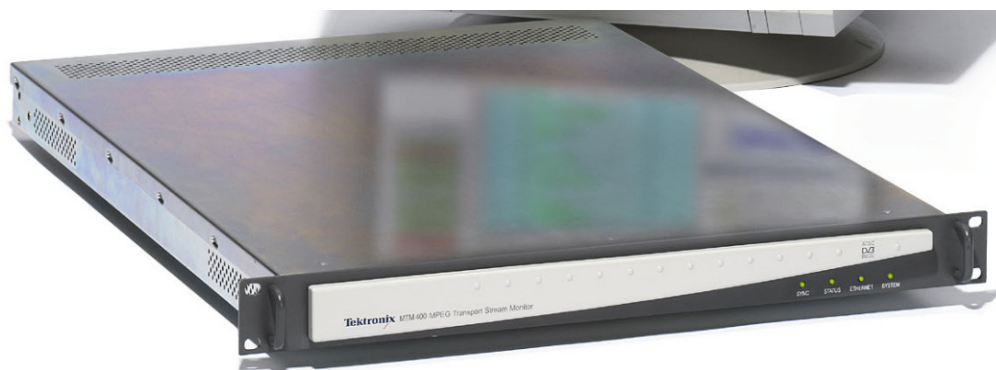
Table 1-138: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"Medius Application Manager"		SNMP – Tektronix Medius	IC-TEKTRONIX-MEDIUS
"Sentry Video Quality Monitor"		SNMP – Tektronix Sentry	IC-TEKTRONIX-PROBE
"MTM400 MPEG TS Monitor"	6.04	SNMP – Tektronix MTM400	IC-SNMP-093
"WFM 7200 Waveform Monitor"		SNMP – Tektronix WFM 7200	IC-SNMP-181
"WVR-Series Waveform Rasterizer"		SNMP – Tektronix WVR611	IC-SNMP-020
		SNMP – Tektronix WVR7200	

Medius Application Manager

Medius offers an advanced reporting package that used to capture detailed QoE information that quickly highlights the top offending programs and/or locations. The reporting capabilities allow each user to generate customized reports that provide as much or as little detail as required, from monthly high-level reports for executive staff to immediate notices for technicians as incidents occur.

MTM400 MPEG TS Monitor



The MTM400 is a real-time MPEG Transport Stream monitor. The MTM400 provides a complete solution for transmission monitoring of MPEG Transport Streams over RF, IP, and ASI interfaces.

- ["Alarms provided by the driver"](#) on page 123
- ["Parameters"](#) on page 125

Table 1-139: Alarms provided by the driver

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
--- Health Monitoring ---					
Communication Status	Status	Poll	driverCommStatus		
Device Reboot	Text	Poll	driverPowerCycle		
--- Errors ---					
BER (Pre Reed Solomon)	Status	Poll	I01/berPreReedSolomon	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
BER (Pre Reed Solomon) Drift Limit	Status	Poll	I01/berPreReedSolomonDriftLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
BER (Pre Reed Solomon) Rate	Status	Poll	I01/berPreReedSolomonRate	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
CNR	Status	Poll	I01/cnrDriftLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
CNR Drift Limit	Status	Poll	cnrDriftLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
CNR Limit	Status	Poll	I01/cnrLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
EVM Drift Limit	Status	Poll	I01/evmDriftLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
EVM Error	Status	Poll	I01/DVB/Errors/EVM	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
EVM Limit	Status	Poll	I01/evmLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
MER	Status	Poll	I01/mer	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
MER Drift Limit	Status	Poll	I01/merDriftLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
MER Limit	Status	Poll	I01/merLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
High Power Limit	Status	Poll	I01/highPowerLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
Low Power Limit	Status	Poll	I01/lowPowerLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
Power	Status	Poll	I01/power	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1

Table 1-139: Alarms provided by the driver (Continued)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
Power Drift Limit	Status	Poll	I01/powerDriftLimit	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
Interface Lock	Status	Poll	I01/ifLock	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
--- Warnings ---					
BER (Pre Reed Solomon)	Status	Poll	I01/berPreReedSolomonDriftLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
BER (Pre Reed Solomon) Drift Limit	Status	Poll	I01/berPreReedSolomonLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
BER (Pre Reed Solomon) Rate	Status	Poll	I01/berPreReedSolomonWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
CNR Drift Limit Warning	Status	Poll	cnrDriftLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
CNR Limit Warning	Status	Poll	I01/cnrLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
CNR Warning	Status	Poll	I01/cnrWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
EVM Drift Limit Warning	Status	Poll	I01/evmDriftLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
EVM Limit Warning	Status	Poll	I01/evmLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
EVM Warning	Status	Poll	I01/evmWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
MER Drift Limit Warning	Status	Poll	I01/merDriftLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
MER Limit Warning	Status	Poll	I01/merLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
MER Warning	Status	Poll	I01/merWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
High Power Limit Warning	Status	Poll	I01/highPowerLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
Low Power Limit Warning	Status	Poll	I01/lowPowerLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1

Table 1-139: Alarms provided by the driver (*Continued*)

Alarm name	Type	Poll/ Trap	Alarm URI	MIB node name	OID
Power Drift Limit Warning	Status	Poll	I01/powerDriftLimitWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1
Power Warning	Status	Poll	I01/powerWarning	mifevtEventState	.1.3.6.1.4.1.128.5.1.17.2.12.1

Certain parameters can be passed to the driver, as follows:

Table 1-140: Parameters

Name	Description/Notes	Default value	Configurable in GUI
pollInterval	Poller interval in seconds. Overwrite the default interval.	10	NO
retries	If an SNMP request times out, this defines the number of retries to be performed.	1	NO
timeout	Delay in seconds before declaring a timeout in the current SNMP request.	5	NO
uniqueID	An extra identifier to be assigned to the plugin to differentiate its alarms from the other plugin of the same type. The uniqueID should be part of uri.		NO
readCommunity	SNMP read community string, used for SNMP polling.	Public	NO
writeCommunity	SNMP write community string, used to send SNMP-set commands.	Private	NO

Sentry Video Quality Monitor

Tektronix Sentry is a comprehensive video and audio quality monitoring solution for advanced video networks. It enables video service providers to deliver high-quality services while reducing operational expenditures.

WFM 7200 Waveform Monitor

The Tektronix WFM 7200 waveform monitor provides a wide variety of video format support and can also include support for Analog, Digital and Dolby audio formats. The monitoring and measurement capabilities of the WFM7200 provide a comprehensive suite of options and configurations to suit a variety of applications. Within a studio or on-location within a truck, match and balance up to four cameras to insure the look of the production from camera to camera, and scene to scene. For 3D Stereoscopic Monitoring, a variety of different 3D monitoring modes are available to assist you in determining the difference between the *Left Eye* and *Right Eye* views.

WVR-Series Waveform Rasterizer

The Tektronix WVR-series of waveform rasterizers help video content producers verify content quality and make precision content adjustments. In video delivery systems, they help

operations staff verify content quality and system reliability, and help engineering staff qualify, install, and maintain video systems. Design and manufacturing engineers developing new video equipment use the waveform monitor for design troubleshooting, functional verification, and manufacturing test.

Terayon

Please see "[Motorola](#)", on page 89.

Thales Defense & Security, Inc.

Table 1-141: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"VC1800 Carrier Monitoring System"		SNMP – Tampa Microwave VC 1800	IC-SNMP-120

VC1800 Carrier Monitoring System

(Formerly Tampa Microwave VC1800 Carrier Monitoring System)

The VC1800 Remote Satcom Carrier Monitoring System is an integrated spectrum monitoring solution that indicates when a carrier problem occurs, and provides tools to restore the link. The VC1800 monitors parameters such as signal power, bandwidth and C/No. The system also detects when an interfering signal is present. It can automatically watch carriers and generate an audible alarm or SNMP alert.

TSL (Television Systems Ltd.)

Table 1-142: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"MDU Mains Distribution Unit"		SNMP – TSL MDU12	IC-SNMP-094

MDU Mains Distribution Unit

Main Distribution Unit that provides automatic Set Top Box (STB) power cycling. Works with SC-11 Under Monitor Display System Controller. MDU-12-B provides 12-way fused mains distribution from a single input. MDU-12-3E provides remote monitoring of any number of MDUs for input and output status via an Ethernet connection. The unit can be monitored using an SNM interface.

T-VIPS

Table 1-143: Ordering information

Hardware	New in iControl version	GSM plug-in name	Order number
"TVG-Series Gateways/CP-Series Processors"	4.40	SNMP – T-VIPS TVG-Series Gateways/CP-Series Processors	IC-SNMP-195

TVG-Series Gateways/CP-Series Processors

CP505 — ATSC Processor

The CP505 ATSC Processor offers flexible ASI, SMPTE 310 and IP network adaptation and advanced Transport Stream processing in a user-friendly and compact 1RU solution.

The CP505 provides an powerful solution for adaptation of MPEG Transport Streams to ATSC broadcast and other transport stream processing applications. The CP505 is offered in two different variants.

The basic model provides format conversion between SMPTE-310M, ASI, transport stream over IP using RJ45 Electrical connections as well as SFP Optical interfaces, SDH and PDH interfaces.

The advanced model offers the basic features plus powerful PID and program filtering with PSIP rebranding and PSI/SI processing.

TVG425 — Transport Stream Gateway

The TVG425 is a transport stream gateway offering real-time contribution and distribution of compressed video over IP networks. It provides transparent handling of up to 8 independent MPEG Transport Streams (TS), flexible interfacing with support for ASI, Ethernet and SONET/SDH, as well as output diversity and input switching capabilities.

Videoframe Inc.

Table 1-144: Ordering information

Hardware	New in iControl version	GSM plug-in name	Plug-in order number
"VF0037 GPI VNODE"		GPI VNODE	

VF0037 GPI VNODE

A VNODE™ is a small-scale signal monitoring system used where there are few monitoring points, where the monitoring points are distributed over a wide area, or where centralized monitoring is not a requirement. There are six different models.

The VF0037 GPI VNODE contains relay output GPI capability for generating local alarm responses. It can report defects to an SNMP manager, or respond to defects by setting its own GPI relays.

Wegener Communications

Table 1-145: Ordering information

Hardware	New in iControl version	GSM plug-in name	Plug-in order number
"DTV720 Transport Stream Multiplexer"		SNMP – Wegener DTV720	IC-SNMP-097

DTV720 Transport Stream Multiplexer

The Wegener DTV720 provides multiplexing options for small cable operators, allowing them to repackage off-air 8VSB and local ASI streams into their headends.

XOR Media (formerly *SeaChange [Broadcast Division]*)

Table 1-146: Ordering information

Hardware	New in iControl version	GSM plug-in name	Plug-in order number
"BML Servers"		SNMP – Seachange BML	IC-SNMP-011.1
"MCL Codec Servers"		SNMP – Seachange MCL	
"VOD Server"		SNMP – Seachange VOD	

BML Servers

XOR Media's Broadcast Media Library (BML)-series of servers is a high-capacity, low cost, scalable, and fault-resilient digital media library.

MCL Codec Servers

XOR Media's MediaClient 6300 (MCL 6300) is a modular and multi-format video server codec that is fully compatible with the XOR Broadcast MediaLibrary 24000ex and the 12000ex systems using the latest hardware platform. With its real-time broadcast-grade software codec architecture, an MCL 6300 purchased today for standard definition (SD) services can be easily repurposed for future high definition (HD) use.

XOR Media's MediaClient 8200 is the latest in the series of broadcast-quality modular codecs that offer multi-resolution and multi-format operations, with the best channel density in the market.

VOD Server

Supported Devices

XOR Media (formerly SeaChange [Broadcast Division])



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For technical assistance, please contact the *Grass Valley Technical Support* center nearest you:

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