

3405FR-DIN

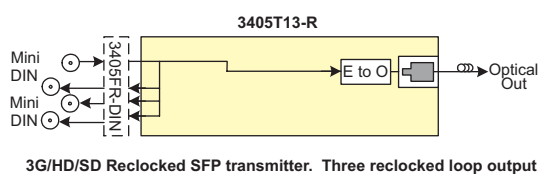
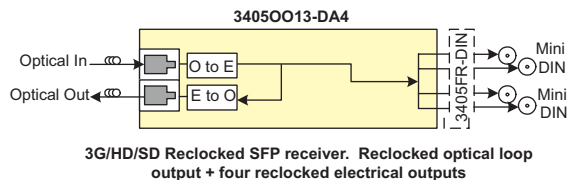
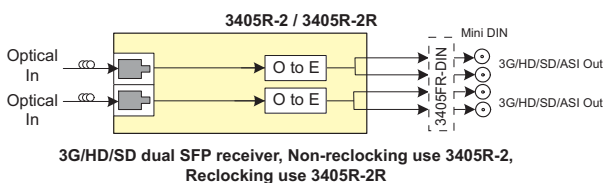
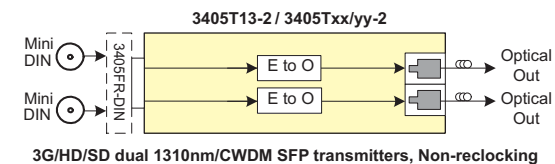
Fiber Optic SFP DIN Frame



3405FR-DIN



SFP Options



The Evertz® 3405FR-DIN SFP frame is the ideal solution for today's low cost, high density fiber optic distribution needs. The 3405FR-DIN provides the flexibility to handle the high-speed requirements of 3G and HDTV as well as SD-SDI, SDTi, and DVB-ASI.

All components are hot swappable through the front of the frame including SFPs, frame controllers and power converters. This ensures the unit can be fully serviceable in the field without having to be de-cabled or removed from the customer's rack.

The 3405FR-DIN is a 1RU frame designed to house up to 16 Evertz® SFP modules. This provides up to 32EO or 32OE in a single rack unit of space. The frame can be configured for a mixture of modules. See SFP options above.

►Features & Benefits

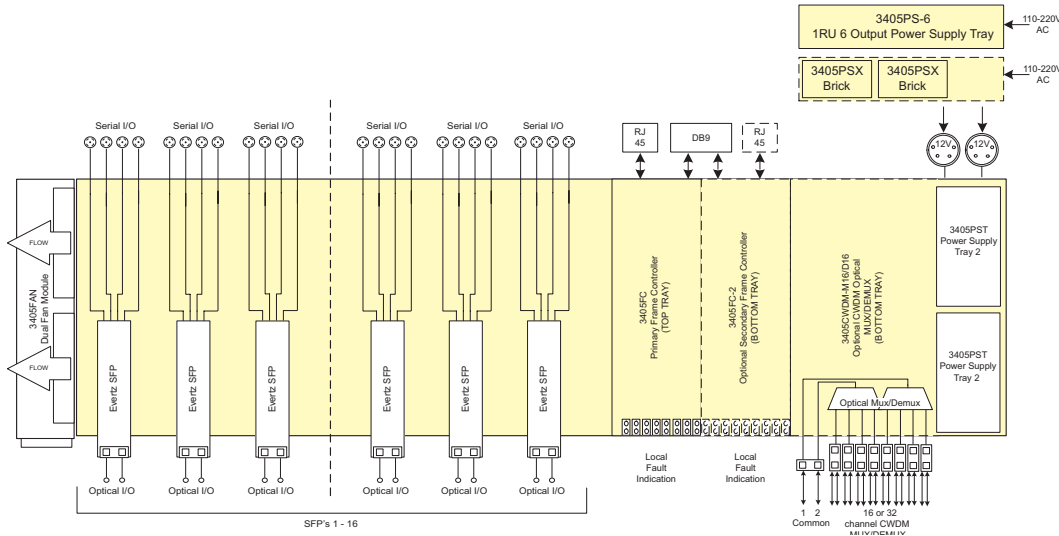
- Dual Power supplies (primary and redundant) and conversion trays (front extractable)
- Houses up to 16 front loading Evertz® SFP modules
- Each slot can be used as an input or output based on SFP type
- Dual primary & secondary 3405FC Frame Controllers for full VistaLINK® SNMP control and monitoring
- No electrical re-cabling required when hot swapping SFP modules

The 3405FR-DIN can be powered by external power bricks or with the 3405PS-6. The 3405PS-6 can power up to 6 x 3405FR-DIN frames with primary & secondary power.

The 3405FR-DIN is VistaLINK® -capable with support for primary and secondary frame controller.

The 3405FR-DIN frame comes with a 3405FAN fan module and 2 x 3405PT power trays. SFPs, frame controllers and power supply modules must be ordered separately. Please see ordering information.

- Power options include external 12V power supply bricks or 1RU power supply tray which will power up to 6 x 3405FR-DIN units redundancy
- Optional bi-directional single or dual Mux/Demux of up to 16 wavelengths in the 1270nm to 1610nm spectrum (ITU-T G.694.2 compliant)
- MTP to LC/UPC fanout cable for convenient fiber connection from Evertz SFPs to Mux/Demux modules



Specifications (NOTE: Electrical input & output specs only apply to reclocking SFP modules(3405T13-R & 3405OO13-DA4))

System:		Electrical Inputs:		Max Power:	
Density:	Up to 32 EO, OE, or mixture of EO and OE in a 1RU unit	Reclocked Standard: SMPTE 424M (3 Gb/s), SMPTE 292M (1.5Gb/s), SMPTE 259M (270Mb/s), DVB-ASI		Dissipation	250 W (primary) 250 W (secondary)
Impedance:	75Ω	Connector: Mini DIN 1.0/2.3		Status Indicators:	Green OK LED, Red Fault LED
Connector:	BNC per IEC 61169-8 Annex A (F-type connector optional)	Equalization: Automatic to 80m @ 3 Gb/s 100m @ 1.5Gb/s 250m @ 270Mb/s (with Belden 1694A or equivalent)		Connector:	
Communication and Control:		Return Loss: > 15dB up to 1.5GHz > 10dB up to 3GHz		Power:	4 PIN XLR (12V DC)
Serial:	RS-232 - single Female 9-pin D connector	Electrical Outputs:		Status Indicators:	PSU status LEDs (each per power supply tray)
Ethernet:	SNMP over IEEE 802.3/U (10/100 BaseTx) RJ45 connector	Connector: Mini DIN 1.0/2.3		Fuses:	5 amp, time delay- 1 per power supply tray
Control:	VistaLINK®	Impedance: 75Ω (nominal)		Physical:	
Optical Output:		Signal Level: 800mV (nominal)		Dimensions:	1.8"H x 19"W x 4.16"D
Number of Outputs:	Up to 2 per SFP	DC Offset: 0V +/-0.5V		Module Capacity:	16 Evertz® SFP modules. Dual TX or Dual RX
Connector:	LC/UPC	Rise and Fall Time: < 135ps (HD/3G) < 900ps (SD)		Operating Temp:	0-50°C (with 3405FAN installed) 0-30° C (with 3405FAN-Q installed)
Rise/Fall Time:	<270ps	Overshoot: < 10% of amplitude		Electrical:	
Optical Power:		Return Loss: >15dB to 1.5GHz >10dB to 3GHz		Power Supply Configuration:	Dual external supplies (primary/secondary 3405PSX) 1RU Power Supply Tray (3405PS-6) DC Input 12V DC (external power supplies required for 110-220V)
Standard:	-2dBm +/-1dBm	Alignment Jitter: < 0.2UI (Reclocked) to 1.485Gb/s < 0.3UI (Reclocked) to 2.97Gb/s		Voltage:	
CWDM:	+3.5dBm +/-1dBm	3405PSX External Power Supply Brick:		Max Power Consumption:	40W (fully loaded frame with all accessories) Note - power consumption dependent on SFP type
Wavelength:		AC Mains Input: Auto ranging, 100 - 240 VAC, 50/60 Hz		Compliance:	
Standard:	1310nm	Number of Outputs: 1		Safety:	CSA Listed, Complies with EU Safety Directive
CWDM:	1270nm-1610nm	Output Voltage: 12VDC		EMC:	Complies with FCC part 15, Class A Complies with EU EMC Directives
ITU-T G.694.2 compliant		Output Connector: 4 PIN XLR			
Optical Input:		3405PS-6:			
Number of Inputs:	Up to 2 per SFP	AC Mains Input: Auto ranging, 100 - 240 VAC, 50/60 Hz			
Connector:	LC/UPC	Number of Outputs: 12 (6 primary, 6 secondary)			
Operating Wavelength:	1270nm to 1610nm	Output Voltage: 12VDC			
Maximum Input Power:		Output Connector: 4 PIN XLR			
Standard:	-1dBm				
Optical Sensitivity:					
Standard:	-21dBm at 2.97Gb/s pathological Level A -23dBm at 2.97Gb/s color bars				

Ordering Information

3405FR-DIN	Fiber Optic SFP DIN frame (does not include power supplies, SFPs, or frame controllers)
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Ordering Options:
+Q 3405FAN-Q Dual quiet fan option

Note: Order one of the power supply options from below

Power Supplies:	
3405PSX	External power supply brick
3405PS-6	1RU 6 output power supply tray for 3405FR-DIN (powers up to 6 units - primary & secondary)

Accessories:	
3405FC	3405 Frame controller
3405FC-2	Redundant Frame controller
3405PST	Power supply tray
3405FAN	3405FR-DIN dual FAN module
3405FAN-Q	3405FR-BNC dual quiet FAN module

Evertz SFP modules:	
3405T13-2	3G/HD/SD dual 1310nm SFP transmitters. Non-reclocking
3405Txx/yy-2	3G/HD/SD dual CWDM SFP transmitters. Non-reclocking

3405R-2	3G/HD/SD dual SFP receiver. Non-reclocking
3405T13-R	3G/HD/SD Reclocked SFP transmitter. Reclocked electrical loop output
3405OO13-DA4	3G/HD/SD Reclocked SFP receiver. Reclocked optical loop output and dual reclocked electrical outputs

Note: xx/yy versions include the following, 27/29, 31/33, 35/37, 43/45 - Low Band
47/49, 51/53, 55/57, 59/61 - High Band

Fiber Optic Mux/Demux Modules(MTP to LC fanout cable not included):	
3405CWDM-2-M16	Dual 16 Channel Mux, 1270nm to 1610nm
3405CWDM-2-D16	Dual 16 Channel Demux, 1270nm to 1610nm
3405CWDM-M16	16 Channel Mux, 1270nm to 1610nm
3405CWDM-D16	16 Channel Demux, 1270nm to 1610nm

Note: 3405CWDM-2-M16/D16 requires 2 x CB-MTP40CM-LCPC-HB & 2 x CB-MTP40CM-LCPC-LB for full 32ch connectivity
3405CWDM-M16/D16 requires 1 x CB-MTP40CM-LCPC-HB & 1 x CB-MTP40CM-LCPC-LB for full 16ch connectivity

Fanout Cables:	
CB-MTP40CM-LCPC-HB	MTP to LC/UPC fanout cable for HIGH band CWDM wavelengths, 1470nm to 1610nm
CB-MTP40CM-LCPC-LB	MTP to LC/UPC fanout cable for LOW band CWDM wavelengths, 1270nm to 1450nm