HARDWARE MANUAL

PMA2 Ultra Performance 2U

2021-31-08 | TR-PMA2-6801S

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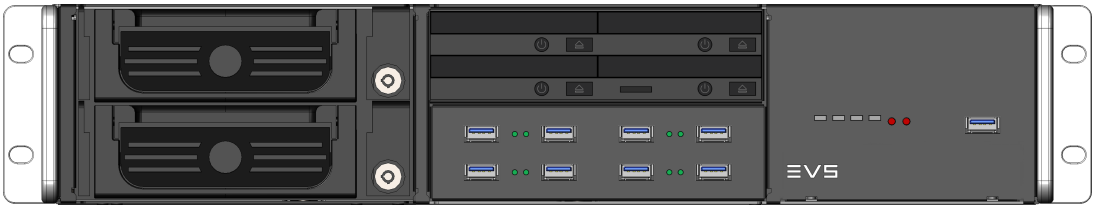
Introduction

This technical document provides an overview of the different hardware configurations and a brief description of the connectors.

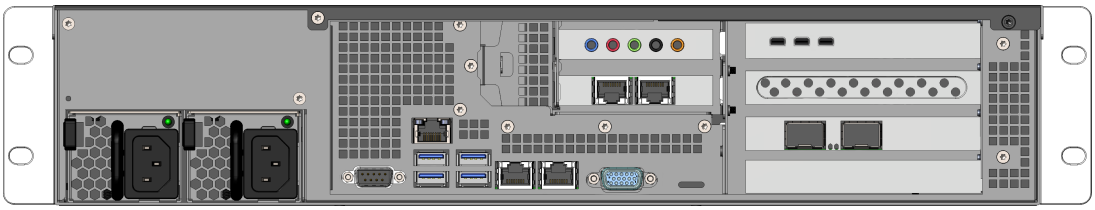
Commercial References

Base Configuration

- **PMA2-6801S:** PMA Application Processing Module 2U 'Ultra Performance'



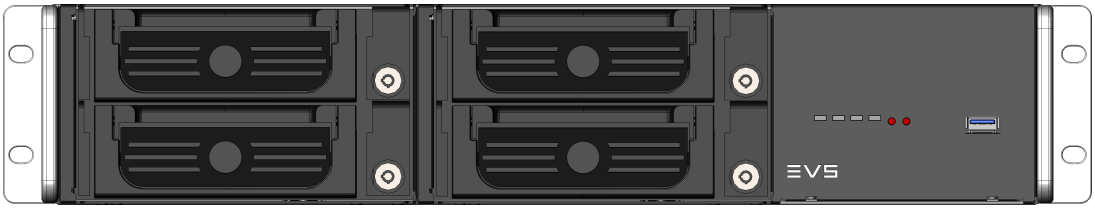
Front View without option



Rear View without option

Storage Options

- **PMA2-6S-SATA+:** removable storage option 2x 4TB SATA HDD

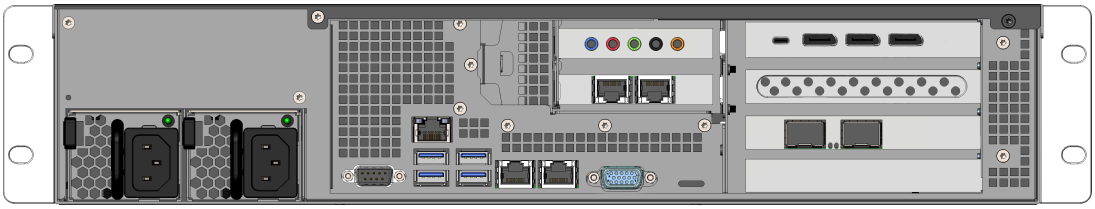


Front View

- **PMA-6S-SDD+:** storage option 1x 1.9TB SDD

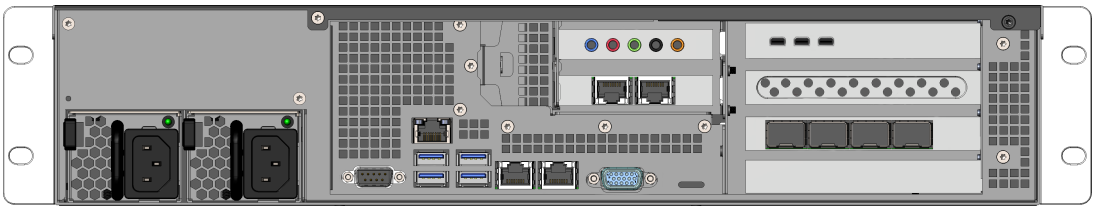
Hardware Options

- **PMA-6S-GPU+:** hardware option 1x GPU NVIDIA RTX4000



Rear View

- **PMA2-6S-AVH+:** hardware option 1x AVH video card
- **PMA2-6S-RS+:** hardware option 1x RS module card
- **PMA-10G-SFP+:** hardware option 2x 10GbE ports (SFP+ connectors)



Rear View

Recommended SFP+ modules:

- **ESSFP-I-10G-SR:** Intel 10 Gb Ethernet SFP+ module 10GBASE-SR (Short Reach)
- **ESSFP-I-10G-LR:** Intel 10 Gb Ethernet SFP+ module 10GBASE-LR (Long Reach)

SFP+ modules from other manufacturers may be used, but EVS cannot guarantee full functionality.

Power Supply & Consumption

The power supply(a) is redundant(b) and hot swappable(c).

Specifications:

- **AC input:** 100-240 V, 50-60 Hz, 12-6A
- **DC output:** 850 W (MAX)
- **Power consumption:**
  - **at boot:** 1 A
  - **at average application usage:** 0.8 A
  - **at full charge:** 1.2 A

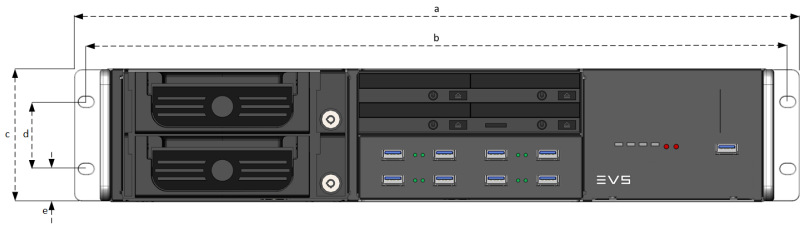
(a) ROHS compliant

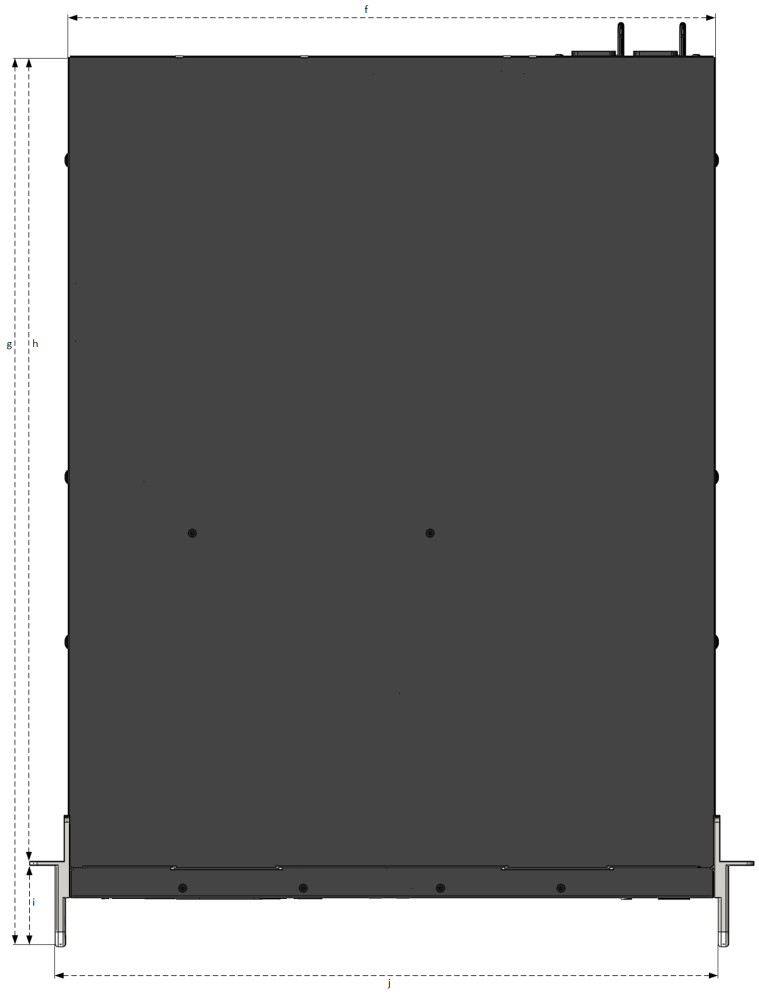
(b) If one module fails, the remaining module will provide enough power to the server.

(c) One module can be changed when the server is running, as long as the other module is still powered.

In case of failure, please order a new PSU directly from EVS. If you order one housing, it will also include two modules.

Chassis Dimensions





	mm	in
a	481	18.94
b	465.20	18.31
c	88.20	3.47
d	44.45	1.75
e	21.48	0.85
f	427.40	16.83
g	666.00	26.22
h	607.00	23.90
i	54.00	2.13
j	447.00	17.60

Weight

19.18 kg / 42.28 lb

Sound Power Level

- **Idle:** 63.2 dB
- **Load at 100%:** 71.3 dB

Hardware & Operating System

Motherboard: Single CPU

CPU: 1x 32-core CPU at 2.5 Ghz with HyperThreading

RAM: 8x 8GB DDR4 ECC 3200

Storage:

- 1x 480GB SSD PCIe NVMe M.2
- 2x4TB SATA HDD in removable canister
- Dock Trayless 5.25" 4 slots 2.5" SSD SATA (without disks)

OS: no OS included

I/Os

1x VGA

1x IPMI

2x Gigabit Ethernet ports (RJ45) (JFC(*)) - Intel card (used by default and for teaming)

2x 10Gigabit Ethernet (SFP+) ports

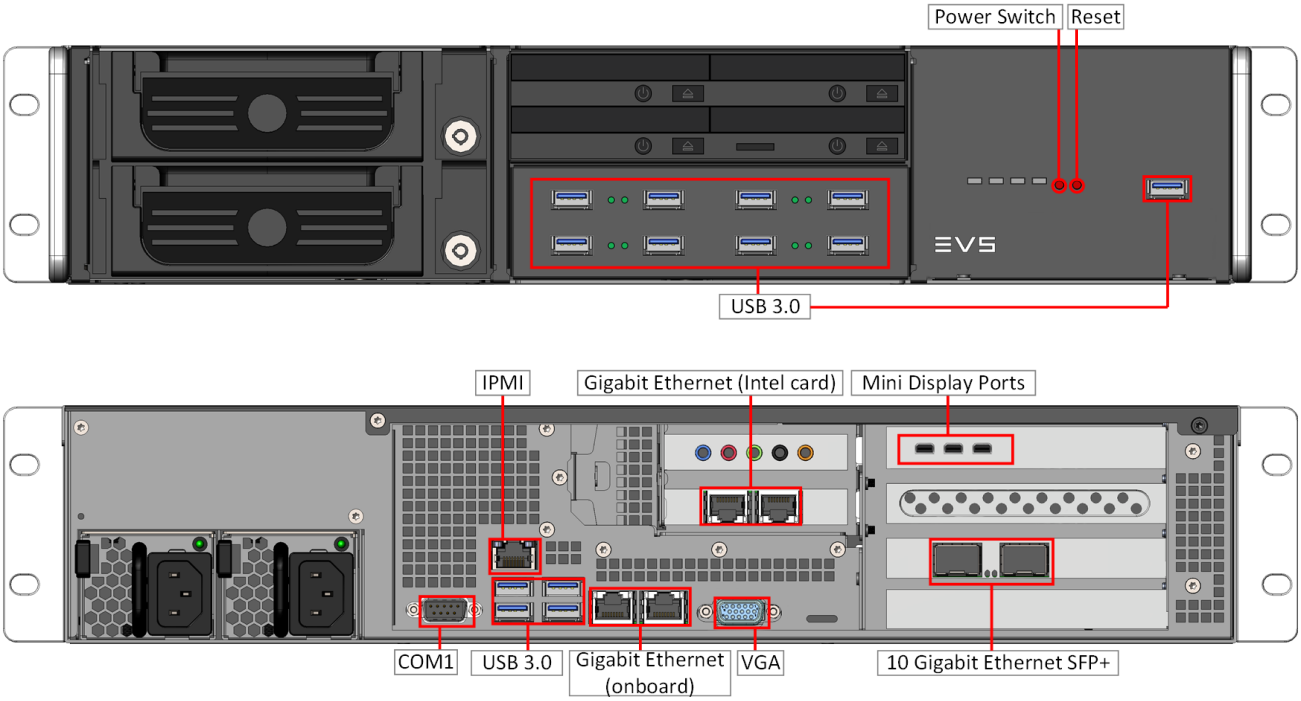
(*) JFC: Jumbo Frame capable

1x COM port

9x USB 3.0 ports (front) + 4x USB 3.0 ports (rear)

2x Gigabit Ethernet ports (RJ45) (JFC(*)) - onboard (not used for Teaming)

3x mini Display ports



Rack Mounting Instructions

The following or similar rack-mount instructions are included with the installation instructions:

Elevated Operating Ambient

If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified on the apparatus.

Reduced Air Flow

Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Mechanical Loading

Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading

Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing

Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

The equipment intended for installation should be placed in Restricted Access Location.

There will be risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions. After performing any installation or servicing, make sure the enclosure is correct in position before turning on the power.

This unit may have more than one power supply. Disconnect all power sources before maintenance to avoid electric shock.

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