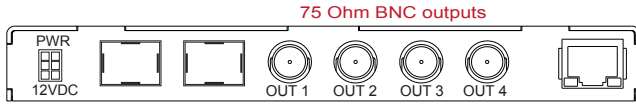


**easyPORT: 4 fixed BNC inputs / 2 SFP output cages**



**easyPORT: 2 SFP cages and 4 fixed BNC Outputs**



**easyPORT: 2 SFP input cages / 2 SFP output cages**

## easyPORT: dual SFP cage to 4 BNC inputs

### INPUTS

Number of SFP cages 2 dual channel

### OUTPUTS

Number of Connections 4  
 Connector Type BNC, 75 Ohm  
 Re-clocking Auto-detect compliant with SMPTE ST-259, ST-292, ST-424  
 Rise/Fall Time < 600 ps, +/- 10% | SMPTE ST-259 < 270 ps, | SMPTE ST-292 < 135ps, | SMPTE ST-424  
 Overshoot < 10% of amplitude ( max.)  
 Alignment Jitter < 0.2UI , 100kHz to 150MHz  
 Timing Jitter < 0.3UI, 150MHz to 300MHz  
 Operational Mode Selections <1.0UI from 10Hz to 100kHz | SMPTE 259/292 < 2.0UI from 10Hz to 100kHz | SMPTE 424  
 AUTO - detects correct signal type  
 MANUAL - force to a specific format  
 BYPASS - allow signals to pass w/o reclocking  
 Data Rates Supported 143Mbps to 3.0Gbps  
 Return Loss >15dB from 5MHz to 1.5Ghz  
 >10dB, 1.5Ghz to 3GHz  
 Output cable drivers SMPTE compliant  
 Output Signal Level 800mV, p-p, +/-10%  
 Output Signal Polarity Non-inverted

### CONTROL & INTERFACES

Network connection 10/100 RJ-45  
 USB mini-USB port  
 Software Catrax Network GUI operates with USB or TCP/IP  
 Switching Built-in 4X4 crosspoint

### ENVIRONMENTAL

Operating Temperature 0-50° C  
 Operating Humidity 1 0-90% non-condensing  
 Size (inches) 6.75 W x .825 H x 6.25 D  
 Size (mm) 171.45mm x 20.96mm x 158.75mm

### OPTIONS

Mounting wall bracket for a single chassis  
 1RU rack mount holds four modules  
 includes power supply and power cables

## easyPORT: 4 BNC outputs to dual SFP cage

### INPUTS

Number of Connections 4  
 Connector Type BNC, 75 Ohm  
 Return Loss >15dB from 5MHz to 1.5Ghz  
 >10dB, 1.5Ghz to 3GHz  
 Input cable equalization SMPTE 259M - 300m  
 SMPTE 292M - 100m  
 SMPTE 424M - 80m  
 Based on Belden 1694A or equal  
 Output Signal Level 800mV, p-p, +/-10%  
 Output Signal Polarity Non-inverted

### OUTPUTS

Number of SFP cages 2 dual channel

### CONTROL & INTERFACES

Network connection 10/100 RJ-45  
 USB mini-USB port  
 Software Catrax Network GUI operates with USB or TCP/IP  
 Switching Built-in 4X4 crosspoint

### ENVIRONMENTAL

Operating Temperature 0-50° C  
 Operating Humidity 1 0-90% non-condensing  
 Size (inches) 6.75 W x .825 H x 6.25 D  
 Size (mm) 171.45mm x 20.96mm x 158.75mm

### OPTIONS

Mounting wall bracket for a single chassis  
 1RU rack mount holds four modules  
 includes power supply and power cables

## easyPORT: dual SFP cage to dual SFP cage

### INPUTS

Number of SFP cages 2 dual channel receivers  
 \* Fiber dual LC  
 \* mini-HD BNC 75 Ohm  
 \* NTSC/PAL to SD-SDI converter  
 \* HDMI to 3G-SDI

### OUTPUTS

Number of SFP cages 2 dual channel transmitters  
 \* Fiber dual LC  
 \* mini-HD BNC 75 Ohm  
 \* SD-SDI to NTSC/PAL converter  
 \* 3G-SDI to HDMI/DVI-D

### CONTROL & INTERFACES

Network connection 10/100 RJ-45  
 USB mini-USB port  
 Software Catrax Network GUI operates with USB or TCP/IP  
 Switching Built-in 4X4 crosspoint

### ENVIRONMENTAL

Operating Temperature 0-50° C  
 Operating Humidity 1 0-90% non-condensing  
 Size (inches) 6.75 W x .825 H x 6.25 D  
 Size (mm) 171.45mm x 20.96mm x 158.75mm

### OPTIONS

Mounting wall bracket for a single chassis  
 1RU rack mount holds four modules  
 includes power supply and power cables

**SFP Features:**

**3Gbps SDI coaxial dual transmitter Non-MSA, HD-BNC**

- SMPTE S-424, S-292, S-259 compliant
- HD-BNC 75 Ohm connector
- Tx Cable Driver
  - supports 270Mb/s, 1.485Gb/s, 2.97Gb/s
- Supports DVB-ASI at 270Mb/s
- Supports video pathological patterns for SD-SDI, HD-SDI, and 3G-SDI
- Hot-pluggable
- Low power consumption - typ. 351mW

**SFP Features:**

**3Gbps SDI coaxial dual receiver Non-MSA, HD-BNC**

- SMPTE ST-424, ST-292, ST-259 compliant
- HD-BNC 75 Ohm connector
- Rx Equalizer
  - Equalizes Belden 1694A up to:
    - 140m at 2.97Gb/s
    - 200m at 1.485Gb/s
    - 400m at 270Mb/s
- Supports DVB-ASI at 270Mb/s
- Supports video pathological patterns for SD-SDI, HD-SDI, and 3G-SDI
- Hot-pluggable
- Low power consumption - typ. 615mW

**SFP Features:**

**3Gbps SDI to HDMI/DVI converter Non-MSA, Type-D**

- SMPTE ST-424, ST-292, and ST-259 compliant
- 10 bit deserializer & audio de-embedder
- Supported formats
  - 525 / 625
  - 720p / 1080i (50, 59.94, 60Hz)
  - 1080p (23.98, 24, 29.97, 30, 50, 59.94, 60Hz)
- HDMI / DVI Output
  - 24 bit
  - RGB 4:4:4, YCbCr 4:2:2, YCbCr 4:4:4
  - Bandwidth 150MHz
  - RGB range (full/SMPTE)
  - Up to 8 Channel audio embedding (PCM)
  - HDMI 1.4 Type D connector

**SFP Features:**

**HDMI to 3Gbps SDI converter Non-MSA, Type-D**

- HDMI / DVI Input
  - 24 bit
  - RGB 4:4:4, YCbCr 4:2:2, YCbCr 4:4:4
  - Bandwidth 150MHz
  - RGB range (full/SMPTE)
  - Up to 8 Channel audio embedding (PCM)
  - HDMI 1.4 Type D connector
- SMPTE ST-424, ST-292, and ST-259 compliant
- 10 bit serializer & audio embedder
- Supported formats
  - 525 / 625
  - 720p / 1080i (50, 59.94, 60Hz)
  - 1080p (23.98, 24, 29.97, 30, 50, 59.94, 60Hz)

**SFP Features:**

**CVBS Codec coaxial dual transmitter Non-MSA, HD-BNC**

- SMPTE ST-259 compliant
- HD-BNC 75 Ohm connector
- Supported composite standards
  - NTSC-M, NTSC-J, NTSC 4.43
  - PAL B/G/H/I/D, PAL M, PAL N, PAL 60
- Rx Channel:
  - 10-bit SD-SDI to Composite video encoder
  - Up to 16x oversampling (216MHz)
- Hot-pluggable
- Power consumption- typ 934mW

**SFP Features:**

**CVBS Codec coaxial dual receiver Non-MSA, HD-BNC**

- SMPTE ST-259 compliant
- HD-BNC 75 Ohm connector
- Supported composite standards
  - NTSC-M, NTSC-J, NTSC 4.43
  - PAL B/G/H/I/D, PAL M, PAL N, PAL 60
- Rx Channel:
  - 10-bit composite to SD-SDI video decoder
  - 4x oversampling (54MHz)
- Hot-pluggable
- Power consumption- typ 1027mW

**FIBER SFP transmitter**

Type of connector	LC, SFP Non-MSA
Output data rates	SMPTE ST-424, ST-292, ST-259
Optical wavelength	Singlemode (1310nm)
Output Power	-9 dBm (min) -3 dBm (max)
Total Jitter	120ps (color bars @ 1.485Gbps)
Output Rise time	80ps, 20-80% unfiltered @143/177/270/360/1485 Mbaud
Output Fall time	240ps,
Fiber Transmission Specifications	IEC 61754-20-1
Typical Operating Distances	9/125u ( 10Km / 6.25 miles) 50/125u (400m / 1200 feet) 62.5/125u (200m / 600feet)

**FIBER SFP receiver**

Type of connector	LC, SFP Non-MSA
Input data rates	SMPTE ST-424, ST-292, ST-259
Optical wavelength	min 1270nm, max 1610nm
Input Power	-20 dBm (min) -1 dBm (max)
Total Jitter	135ps (color bars @ 1.485Gbps)
Fiber Transmission Specifications	IEC 61754-20-1
Typical Operating Distances	9/125u ( 10Km / 6.25 miles) 50/125u (400m / 1200 feet) 62.5/125u (200m / 600feet)

NOTE: Operating distances are approximate only. Cable loss and other interconnects can affect the total light loss between a TX and RX path. These are only estimates and may not reflect the actual lengths achievable.

NOTE: Operating distance is approximate. Typical distances may vary depending on factors such as fiber type, bandwidth, connector splicing, dispersion, and environmental factors.

Laser devices used in Quadbox modules are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

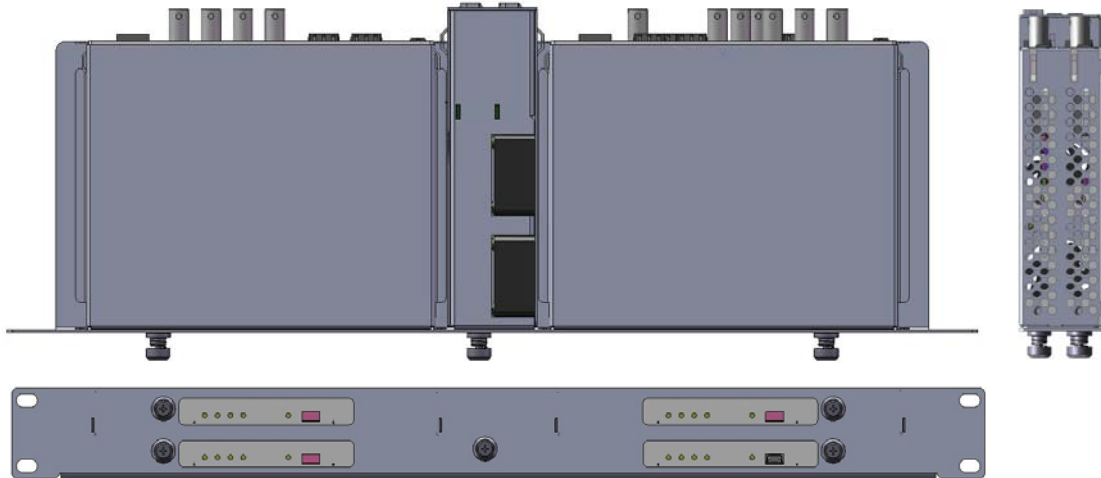
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1RU FRAME



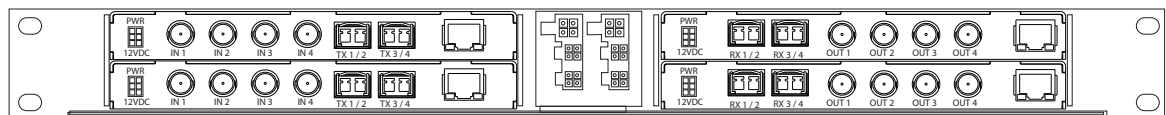
## Power Distribution Rack Mount Kits

PESA's Power Distribution Rack kits offer a more streamlined and power efficient method of managing multiple modules in a rack mounted environment. These power distribution rack mount systems are optimized for PESA's Vidblox and easyPORT series of extender modules. Sharing a common power supply source, up to four easyPORT series or two VidBlox series units can be installed in the 1RU frame.

**Power Efficiency** - Units include an AC Adapter module for 100-240V, 47-63Hz, 1.2A power input providing 12V,7A output. Easy deployment options include connectivity methods for a single power source or a redundant power source. AC power is based on a standard IEC plug for easy adaption to any worldwide AC outlet

**Flexible mounting** – The power distribution rack mount system makes use of a quick and easy “no-tools” mounting system with captive thumb-screws to hold each module in place. With this design any easyPORT or Vidblox unit can be removed, replaced, or swapped more efficiently without the need of powering down other modules in the rack.

**Viewable front LED indicators** – each rack frame has openings to allow immediate monitoring of LED displays on the front panel of each installed module.



**1RU Extender Frame:** allows up to four easyPORT modules to be installed in a 1RU frame. Includes distribution power module that can power all four modules with one power supply. 100VAC to 240VAC, 47-63Hz, 1.2 Amps.

