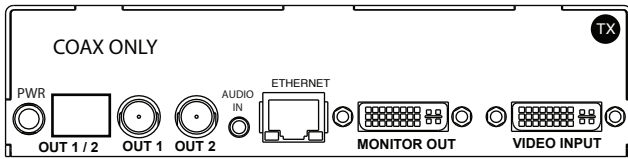
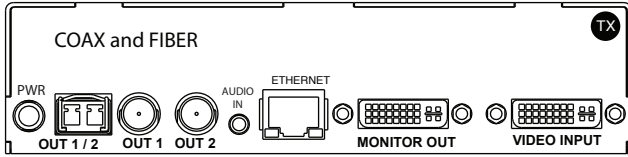


VIDBLOX - SL-3G Series

Convert single link DVI, VGA, RGB, YPbPr to SDI signals



PESA's VidBlox SL-3G DVI Fiber Optic Extender transmits DVI (HDMI with adapter) or Computer Video signals over fiber or coax cable with the performance characteristics of high definition digital video; based on industry standard SMPTE transports for HD/3G-SDI. Engineered for 3G-SDI high resolution image performance, the PESA VidBlox series offers pixel-for-pixel transmission of DVI computer video images up to 1920X1200 - including 1080p/60. The Vidblox includes EDID emulation coding, internal test patterns, and an input monitoring port. As one of the most compact packages available, the VidBlox can be mounted just about anywhere or can be securely mounted with our under-the-table mounting bracket or our exclusive 2RU extender frame holding up to four modules.

The VidBlox SL-3G is perfect for a wide range of applications requiring long distance transmission of high resolution video over fiber or coax cable.

With the ability to output a SMPTE compliant format, the SL-3G can be integrated into any broadcast facility routing system allowing simple integration of DVI or VGA signals alongside traditional 3G-SDI. The SL-3G module, when used in conjunction with the 3G-SL receiver modules, can be setup as an additional transport layer to any 3G-SDI routing system.

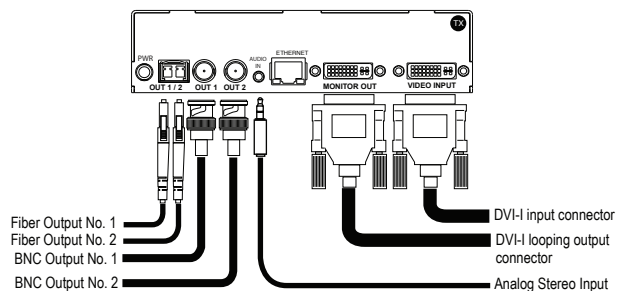
Offering both coax and fiber inputs in the same SL-3G module opens up a wide range of capabilities for mission critical redundancy or system backup requirements. With the optional fiber ports activated, systems can be setup for long haul video transports well over 10km; and with the parallel coax outputs, local displays can be supported at distances as far as 80m away.

Because transmission over fiber is inherently secure and immune to outside interference, fiber applications are favored in government, military, and medical environments. The SL- 3G supports both singlemode and multimode fiber cabling with an optional duplex SFP pluggable fiber module. Each port supports output data rates up to 1080p/60. Additionally, each SL-3G comes with two BNC ports allowing two additional HD/3G output ports. With a total of four output ports, the SL-3G can be configured to support up to four displays per input.

The SL-3G accepts unbalanced stereo audio and embeds the signal for transport over the SMPTE output transport stream. Also included on the output transport video is resolution format data which, when connected to a 3G-SL receiver unit, can properly communicate specific resolutions and format data of the received signal.

Each SL-3G can be controlled and configured using PESA's Cattrax control software application through a USB connection, or up to 1024 modules can be managed or monitored over a network connection. A wide range of adjustments and calibration features are available through Cattrax allowing output scaling, progressive to interlace conversion, test pattern setup, audio muting, analog phase adjustments, and a large array of signal measurements for fiber and coax outputs.

In addition to DVI and VGA inputs, each SL-3G can be configured to accept other component video inputs such as RGsB, RGBS, and RGBHV where sync levels are different than traditional VGA. Each SL-3G can be used in conjunction with all PESA 3G-SDI routers and distribution gear.



Specifications

- Extend DVI-I and stereo audio over a single fiber up to 10Km with SM cables
- Extend DVI-I and stereo audio over a coax cable up to 80m
- Accepts inputs up to 1920X1200@60Hz (WUXGA)
- SMPTE compliant transports provide perfect pixel performance
- Outputs broadcast standard formats for ST-259, ST-292, ST-424 video
- Allows up to four 720p/1080i/1080p outputs per module
- Allows both singlemode and multimode fiber in the same module
- Full set of LED indicators for monitoring and troubleshooting
- Alarm notifications via software interface
- Auto memory – module remembers last know setup
- EDID emulation mode
- User configurable resolution setup
- 12 internal test patterns for testing and calibration
- Analog video H&V pixel adjustments
- Analog video phase adjustments
- Audio gain adjustments and muting
- Rack mount and under-table mounting brackets available
- 10/100 network interface (control software optional)
- Redundant power in 2RU extender frame

Model	Description	Part Number
VIDBLOX	Media extender, DVI / VGA to SD/HD/3G-SDI, coax only	VIDBLOX-SL-3G-C
VIDBLOX	Media extender, DVI / VGA to SD/HD/3G-SDI, fiber & coax	VIDBLOX-SL-3G-F



COMPUTER INPUT SPECIFICATIONS

Input Connector Type – Computer	DVI-I
Local Output Connector – Looping	DVI-I
Input Connector Type – Audio	3.5mm stereo jack
Connector Type – Network	RJ-45
Number of Inputs – Computer	1
Number of Computer Monitoring Outputs	1
Number of Inputs – Audio	1
Computer Input Signal Type	DVI, VGA, RGB, RGBHV, YPbPr
Audio Input Signal Type	Stereo Audio – unbalanced
Computer Input Resolutions	DVI up to 1920X1200@60Hz VGA and component video to 1920X1200@60Hz RGB, YPbPr at 720p/1080i/1080p
Input Resolutions Supported	640X480@60Hz, 800X600@60Hz, 1024X768@60Hz, 1280X1024@60Hz, 1680X1050@60Hz, 1600X1200@60Hz, 1360X768@60Hz, 1920X1200@60Hz,
Selectable Frame Rates	50 / 59.94 / 60
Signal Input Formats	CEA-861-E, DDWG 1.0
Input Data Rates	1.65 Gbps (single-link)
Input Color Depth	24bit
Input DDC Protocol	E-EDID (emulated)
Input Hot Plug Detect	Yes

VIDEO TRANSPORT SPECIFICATIONS

Output Video Standard	SMPTE 292M, 424M
Output Connector Style	75 Ohm BNC (X2) LC Fiber (Duplex SFP)
Number of Outputs – BNC	2
Number of Outputs – Fiber	2 (optional)
Output Format Signals	720p / 1080i / 1080p
Output Data Rates	1.5Gbps (HD) and 3.0Gbps (3G-SDI)
Digital Outputs – BNC Impedance	75 Ohm
Return Loss	> 15dB from 5MHz to 1.5GHz > 10dB, 1.5GHz to 3GHz
Output Signal Level	800 mV p-p, +/- 10%
Output Signal Polarity	Non-inverting
Output Jitter	SMPTE 292M < 0.2UI, p-p SMPTE 424M < 0.3UI, p-p Compliant with RP-184
Reclocking	SMPTE compliant

Digital Outputs - Fiber

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 Vidblox 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.

Connector Type	Dual SFP (small form factor pluggable)
Connector Cable Style	LC
Output Data Rates	1.5Gbps (HD) and 3.0Gbps (3G-SDI)
Optical Wavelength	1310nm
Output Power	Min. -9dBm, Max. -3dBm
Output Loss Budget	Approx. 9dB (assumes two optical couplers w/ 10km SM cabling)

Typical Operating Distances

9/125u	estimated at 10Km (6.25 miles)
50/125u	approx. 400m (1200ft)
62.5/125u	approx. 200m (600ft)

Rise / Fall Time

SMPTE 292M	≤ 270 ps
SMPTE 424M	≤ 135 ps
Overshoot	< 10% of amplitude (max.)

Alignment Jitter

SMPTE 292M	< 0.2 UI
SMPTE 424M	< 0.3 UI

Timing Jitter

SMPTE 292M	< 1.0 UI
SMPTE 424M	< 2.0UI

AUDIO INPUT SPECIFICATIONS

Connector Style	3.5mm mini stereo jack
Audio Impedance	>20k Ohms, unbalanced, DC coupled
Input Level	Line level (3.7V p-p max.)
Maximum level	+10dBu
Frequency Response	+/- 0.1dB, 20Hz to 20kHz
THD+N	< 0.01%
SNR	> 90dB
Audio bits per sample	18 bits per channel, 2 channels (L,R)
Sample Rate	48kHz

ENVIRONMENTAL

Operating Temperature	0-40° C
Operating Humidity	10-90% non-condensing
Product Dimensions / Weight	6.75 (171.45)W X 6.25 (158.75)D X 1.650 (H) 0.5 lbs per unit

CONTROL

Control Input Port	Mini-USB for local software setup and diagnostics 10/100 Ethernet port for network control
Control Program	Catrx - Network Control Software

POWER

External Power	90VAC to 240VAC, 50-60Hz, external, 12VDC, 1A, regulated Power Brick with optional AC inlet for U.S., UK, or EURO style plugs
Power Input – Modules	12VDC, 0.4A

RACK MOUNTING OPTIONS

Rack Mount Kits	1RU Frame – holds two units 2RU Frame – holds four units
Rack Mount Cooling	Two Fans mounted in power distribution module
Temperature /Humidity Storage:	-40 to +70 C / 10% to 90%, non-condensing
Operating	0 to 50 C / 10% to 90%, non-condensing
AC adapter Input	100VAC to 240VAC, 47-63Hz, 1.2A max., IEC plug
AC adapter Output	12VDC, 7A max.
1RU Rack Mount Kit Dimensions / Weight	19.00W X 6.25D X 1.75H 482.6mm X 158.75mm X 44.45mm 1.65lbs empty, 3.65lbs full
2RU Rack Mount Kit Dimensions / Weight	19.00W X 6.25D X 3.50H 482.6mm X 158.75mm X 88.9mm 2.00lbs empty, 4.65lbs full
Redundant power available as an option	

Under-table mounting bracket includes mounting holes and thumbscrews for quick removal of module

WARRANTY

3 years parts and labor

SAFETY AND COMPLIANCE

CE	EN60950, EN55022
FCC	FCC Part 15
Environmental	RoHS / WEEE
Fiber Safety	Class 1 Laser Product IEC 60825-1:1993 + A1:1997 + A2:2001