

PowerCage FOX DVI Plus

FIBER OPTIC EXTENDER FOR DVI,
AUDIO, AND RS-232



FOX Tx DVI Plus

FOX Rx DVI Plus

The PowerCage FOX DVI Plus Fiber Optic Extender is a modular transmitter and receiver set designed for the PowerCage 1600 enclosure that provides long haul transmission of DVI, stereo audio, and RS-232 control signals over a single fiber. The transmission capabilities and extensive feature set of the PowerCage FOX DVI Plus make it ideal for a wide range of applications requiring long distance delivery of high resolution content with the highest quality.

- ▶ Extends single link DVI-D, stereo audio, and RS-232 control signals very long distances over a single fiber
- ▶ Provides pixel-for-pixel performance with signals up to 1920x1200, including HDTV 1080p/60
- ▶ Integrates easily into a wide range of 4K and UHD environments
- ▶ Modular, hot-swappable boards designed for the PowerCage 1600 enclosure
- ▶ EDID Emulation provides selectable resolutions and refresh rates to ensure reliable operation
- ▶ Daisy-chain capability
- ▶ Alarm notification for fiber link loss
- ▶ Auto Input Memory
- ▶ RS-232 control
- ▶ Internal test patterns for calibration and setup
- ▶ Compatible with Extron FOX Matrix Switchers for signal distribution systems up to 1000x1000 and larger
- ▶ Available as 850 nm multimode and 1310 nm singlemode models



Extron Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron **PowerCage FOX DVI Plus** Fiber Optic Extender is a modular transmitter and receiver set designed for the PowerCage 1600 enclosure that provides long haul transmission of single link DVI-D, stereo audio, and RS-232 control signals over a single fiber. Engineered for reliability and exceptional high resolution image performance, the PowerCage® extender uses Extron all-digital technology to deliver perfect pixel-for-pixel transmission of DVI computer video up to 1920x1200 resolution, including HDTV 1080p/60. The PowerCage FOX DVI Plus includes many integrator-friendly features such as an EDID Emulation mode, Auto Input Memory, RS-232 control, daisy chaining, internal test patterns, and real-time system monitoring.

As part of the extensive FOX Series of fiber optic products from Extron, the PowerCage FOX Tx DVI Plus is compatible with FOX Series HDMI and DVI Plus extenders. The receiver board is compatible with the complete line of FOX Series HDMI, DVI Plus, DVI, VGA, and VGA/YUV transmitters. The extender can be used for simple point-to-point applications or in combination with FOX Series matrix switchers for support of enterprise installations.

FEATURES

- ▶ Extends single link DVI-D, stereo audio, and RS-232 control signals very long distances over a single fiber
- ▶ All-digital technology provides pixel-for-pixel performance up to 1920x1200, including HDTV 1080p/60
- ▶ Integrates easily into a wide range of 4K and UHD environments
- ▶ Modular, hot-swappable boards designed for the PowerCage 1600 enclosure, part # 60-978-01
- ▶ EDID Emulation provides selectable resolutions and refresh rates to ensure reliable operation
- ▶ Daisy-chain capability
- ▶ Second fiber link enables bidirectional RS-232 pass-through, control from either location, and real-time system monitoring
- ▶ Auto Input Memory and 30 user memory presets
- ▶ Audio gain/attenuation adjustment and muting capability
- ▶ Internal test patterns for calibration and setup
- ▶ Auto-Image™ automatically optimizes output
- ▶ Compatible with Extron FOX Matrix Switchers for signal distribution systems up to 1000x1000 and larger
- ▶ Compatible with Extron FOX Series distribution amplifiers
- ▶ Compatible with Extron FOX Series HDMI, DVI, VGA, and VGA/YUV extenders
- ▶ Available as multimode and singlemode models

SPECIFICATIONS

NOTE: The optional PowerCage FOX Tx and Rx DVI Plus boards are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

OPTICAL FIBER INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Number/type	1 singlemode or 1 multimode fiber optic input and output per FOX board, up to 8 double space boards per PowerCage enclosure
Connectors	2 bidirectional LC connectors per FOX board
Operating distance	
Singlemode	30 km (18.75 miles) with singlemode (SM) cables with a SM board
Multimode	300 m (985') with 62.5 µm OM1 multimode (MM) cable and a MM board 1 km (3280') with 50 µm OM2 multimode (MM) cable and a MM board 2 km (6561') with 50 µm OM3/OM4 2000 MHz bandwidth laser optimized MM cable and a MM board
Optical loss budget	
Singlemode	13 dB, maximum
Multimode	7 dB, maximum
Maximum channel data rate	4.25 Gbps

VIDEO

Resolution range	Up to 1920x1200 or 1080p @ 60 Hz pixel for pixel
Formats	RGB and YCbCr digital video
Standards	DVI 1.0, HDMI

VIDEO OUTPUT — POWERCAGE FOX RX DVI PLUS

Video delay	1-2 frames
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AUDIO INPUT — POWERCAGE FOX TX DVI PLUS

Nominal level	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
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AUDIO OUTPUT — POWERCAGE FOX RX DVI PLUS

Nominal level	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Audio delay	1.5 frames

GENERAL

Power	Supplied by a PowerCage 1600 enclosure
Power consumption	FOX DVI Plus Tx: 5.68 watts FOX DVI Plus Rx: 6.18 watts
Thermal dissipation	27.6 BTU/hr

Regulatory compliance

Safety	CE, c-UL, FDA Class 1, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI
Environmental	Complies with the appropriate requirements of RoHS, WEEE.

Warranty	3 years parts and labor
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Model	Version Description	Part number
PowerCage FOX Tx DVI Plus MM	Multimode - Transmitter	70-873-11
PowerCage FOX Rx DVI Plus MM	Multimode - Receiver	70-873-21
PowerCage FOX Tx DVI Plus SM	Singlemode - Transmitter	70-873-12
PowerCage FOX Rx DVI Plus SM	Singlemode - Receiver	70-873-22

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

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