

Specifications

FOX 3G DVC Series

NOTE: The FOX 3G DVC units can be used with Extron FOX Series HD-SDI transceivers. The FOX 3G DVC is available in singlemode and multimode versions.

NOTE: The FOX 3G DVC models are class 1 laser products. They meet the safety regulations of IEC-60825, and CFR 1040.10.

Optical specifications

Number/type..... 1 fiber optic input
1 fiber optic buffered loop-through

NOTE: Only one fiber is required to transmit video and embedded audio.

Connectors 1 LC connector

Operating distance

Singlemode 30 km (18.75 miles) with singlemode (SM) cables with a FOX 3G HD-SDI SM

Multimode 500 m (1640') with 62.5 μ m OM1 multimode (MM) cables with a FOX 3G HD-SDI MM

1 km (3280') with 50 μ m OM2 multimode (MM) cables with a FOX 3G HD-SDI MM

2 km (6561') with 50 μ m OM3/OM4 2000 MHz bandwidth laser optimized

multimode (MM) cables with a FOX 3G HD-SDI MM

NOTE: Operating distance is approximate. These are typical maximum distances that may vary depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.

Nominal peak wavelength 850 nm for MM unit; 1310 nm for SM unit

Transmission power -5 dBm, typical

Maximum receiver sensitivity

Singlemode -18 dBm, typical

Multimode -12 dBm, typical

Optical loss budget

Singlemode 13 dB, maximum

Multimode 7 dB, maximum

Video

Signal type..... SDI, HD-SDI, and 3G-SDI digital video signals

Data rates 270 Mbps, 1.485 Gbps, 2.970 Gbps

Operation standards SMPTE 259M-C, SMPTE 292M, SMPTE 424M

Auto data rate lock..... Yes

Video input and loop through

Number/signal type..... 1 SDI (SMPTE 259M-C, 270 Mbps; NTSC; PAL), HD-SDI (SMPTE 292M, 1.485 Gbps), or 3G-SDI digital component video (SMPTE 424M, 2.97 Gbps)

Connector..... 1 LC connector (fiber optic)

Data rates 270 Mbps to 2.97 Gbps

Horizontal frequency 15 kHz to 100 kHz

Vertical frequency..... 24 Hz to 60 Hz

Resolution range..... NTSC, PAL, 720p, 1080i, 1080p

Video processing

Digital sampling.....	24 bit, 8 bits per color, 165 MHz standard
Colors.....	16.78 million

Video output

Number/signal type.....	1 single link DVI-D 1 RGB, YUV / YPbPr
Connectors.....	1 female DVI-I 1 female 15-pin HD
Nominal level	
TMDS.....	1.0 Vp-p swing
Analog.....	1 Vp-p for Y of component video 0.7 Vp-p for RGB and for R-Y and B-Y of component video
Impedance	
TMDS.....	100 ohms
RGB.....	75 ohms
Return loss.....	<-25 dB @ 100 MHz
DC offset.....	±5 mV with input at 0 offset

Sync

Output type.....	RGBHV, RGBS, RGsB, component video (bi-level or tri-level)
Output level.....	5.0 Vp-p for RGB 0.6 Vp-p for component video tri-level sync 0.3 Vp-p for component video bi-level sync
Output impedance.....	75 ohms
Output polarity.....	Positive or negative (selectable)

Audio

Frequency response.....	20 Hz to 20 kHz, ±0.2 dB
THD + Noise.....	0.05% @ 1 kHz at nominal level, 0 dB gain
S/N.....	>100 dB at maximum output (unweighted)
Stereo channel separation.....	>80 dB @ 1 kHz

Audio input

Number/signal type.....	1 SDI embedded audio (SMPTE 272M, SMPTE 299M)
Connector.....	1 LC connector (fiber optic)
Adjustment range.....	-18 dB to 0dB

Audio output

Number/signal type.....	1 stereo, balanced/unbalanced
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Gain error.....	±0.1 dB channel to channel
Maximum level (Hi-Z).....	+21 dBu, balanced, or +15 dBu, unbalanced at 0.05% THD+N

Control/remote – decoder

Serial control port.....	1 RS-232, 3.5 mm captive screw connector, 5 pole (uses 3 poles)
Baud rate and protocol.....	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration.....	3 = Tx, 4 = Rx, 5 = Gnd
USB control ports.....	1 front panel female mini USB B
USB standards.....	USB 2.0, low speed
Program control.....	Extron Simple Instruction Set (SIS™)

General

Power supply	Internal Input: 100-240 VAC, 50-60 Hz
Power consumption	12 watts
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, sides to top
Thermal dissipation	24 BTU/hr
Mounting	
Rack mount	Yes, with optional 1U rack shelf
Furniture mount	Yes, with optional through-desk mounting kit or under-desk mounting kit
Enclosure type	Metal
Enclosure dimensions	1.75" H x 8.75" W x 9.5" D (1U high, half rack wide) 4.4 cm H x 22.2 cm W x 24.1 cm D (Depth excludes connectors and knobs.)
Product weight	2.3 lbs (1.1 kg)
Shipping weight	6 lbs (3 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, c-UL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI
Warranty	3 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$.

NOTE: Specifications are subject to change without notice.

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