

Specifications

FOX II DP Series

NOTE: The analog audio signal(s) is (are) digitized in the transmitter, sent through the fiber cable, and converted back to analog audio in the receiver.

NOTE: These transceivers are class 1 laser products. They meet the safety regulations of IEC-60825.

Optical fiber interconnection between transmitter and receiver

Number/type.....	2 fiber optic
Connectors.....	2 LC connectors
Operating distance	
Singlemode	30 km (18.75 miles) with singlemode (SM) cables with an SM unit
Multimode	300 m (984') with 62.5 μ m OM1 multimode (MM) cables with an MM unit 1 km km (3280') with 50 μ m OM2 multimode (MM) cables with an MM unit 2 km (6561') with 50 μ m OM3/OM4 2000 MHz bandwidth laser optimized multimode cable with an MM unit

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 multimode, 1310 nm for singlemode

Data rate..... 4.25 Gbps

Transmission power

Singlemode	-5 dBm, typical
Multimode	-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

Maximum data rate..... Up to 10.8 Gbps (2.7 Gbps per lane)

Maximum resolution..... Up to 1920x1200 @ 60Hz, 1080p @ 60Hz and 2560x1600 @ 60Hz

Color bit depth..... 12 bits for resolutions up to 1080p. 10 bits for all resolutions above 1080p.

EDID Supports emulation of custom or factory preset Extended Display Identification Data (EDID) tables.

Standards..... DisplayPort 1.1a

Video input and loop through — transmitters

Number/signal type..... 1 DisplayPort input

1 DisplayPort loop-through

Connectors..... 1 female DisplayPort input

1 female DisplayPort loop-through

Video output – receiver

Number/signal type.....	1 DisplayPort
Connectors.....	1 female DisplayPort
Video delay	2 frames

Audio

Gain

Range Adjustable, -18 dB to +10 dB

Default

Captive screw connector ... Balanced output: 0 dB; unbalanced output: -6 dB

Mini stereo jack..... Unbalanced output: 0 dB

Frequency response 20 Hz to 20 kHz, ± 0.5 dB

THD + Noise 0.10% @ 1 kHz at nominal level

S/N >90 dB at maximum output (unweighted)

CMRR..... 65 dB @ 20 Hz to 20 kHz

Audio bits per sample 18 bits per channel, 2 channels (L, R)

Sampling rate..... 32 kHz, 44.1 kHz, 48 kHz

Audio input – transmitter

Number/signal type.....	1 digital audio, de-embedded from DisplayPort or 2 inputs: 1 balanced stereo 1 unbalanced stereo or 2 unbalanced mono
Connectors.....	1 female DisplayPort (shared with video input) (1) 3.5 mm stereo jack (1) 3.5 mm captive screw connector, 5 pole
Impedance.....	≥ 10 k ohms unbalanced, ≥ 20 k ohm balanced
Nominal level.....	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level	+15.0 dBu, balanced at 1% THD+N (5-pole); +6 dBV, unbalanced (3.5 mm stereo)
Source formats	PCM, Dolby TrueHD, Dolby Digital Plus, Dolby Digital EX, Dolby® Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, DTS-HD Master Audio, DTS-HD, DTS Digital Surround 5.1, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV \approx 2 dBu

Audio output – receiver

Number/signal type.....	1 digital audio, embedded with DisplayPort output
2 buffered outputs:	
Connectors	1 balanced stereo; 1 unbalanced stereo or 2 unbalanced mono
Connectors	1 female DisplayPort (shared with video output) (1) 3.5 mm stereo jack (1) 3.5 mm captive screw connector, 5 pole
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Nominal level.....	+4 dBV (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level (Hi-Z).....	+15.0 dBu, unbalanced at 1% THD+N
Audio delay.....	2 frames
Source formats	PCM, Dolby TrueHD, Dolby Digital Plus, Dolby Digital EX, Dolby® Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, DTS-HD Master Audio, DTS-HD, DTS Digital Surround 5.1, DTS-ES Matrix 6.1, DTS-ES Discrete 6.1

Audio return input – receivers

Number/signal type.....	1 stereo/mono, balanced or unbalanced
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole
Impedance.....	$\geq 10\text{k ohms}$ unbalanced, $\geq 20\text{k ohm}$ balanced
Nominal level.....	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level (Hi-Z).....	+15.0 dBu, balanced at 1% THD+N
Audio delay.....	2 frames

Audio return output – transmitter

Number/signal type.....	1 stereo/mono, balanced or unbalanced
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole
Impedance.....	50 ohms unbalanced, 100 ohms balanced
Nominal level.....	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level (Hi-Z).....	+15.0 dBu, balanced at 1% THD+N
Audio delay.....	2 frames

Control/remote

Serial control ports on each unit (transmitter and receiver)

Control	1 female mini USB port B (front panel) 1 RS-232, 3.5 mm captive screw connector, 5-pole (3 pins are used), rear panel
Pass-through.....	1 RS-232, 3.5 mm captive screw connector, 5-pole (3 pins are used), rear panel
Baud rate and protocol	
Control	9600 baud, 8 data bits, 1 stop bit, no parity
Pass-through.....	9600 to 115,200 baud
Serial control pin configuration	Captive screw: 4 = Tx, 5 = Rx, 3 = GND
Program control	Extron control/configuration program for Windows® Extron Simple Instruction Set (SIS™)
IR control port.....	(1) 3.5 mm captive screw connector, 5 pole (connector is shared with RS-232 pass thru) TTL level (0 to 5V) modulated infrared control from 30kHz to 40 kHz
IR control pin configuration	3 = GND, 4 = IR Tx, 5 = IR Rx

General

Power supply.....	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 2 A, 24 watts
-------------------	---

Power consumption

Transmitter	
Device	16.5 watts, 12 VDC
Device and power supply...	19.4 watts, 100 - 240 VAC, 50-60 Hz

Receiver

Device	14.2 watts, 12 VDC
Device and power supply...	15.8 watts, 100 - 240 VAC, 50-60 Hz

Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +104 °F (0 to +40 °C) / 10% to 90%, noncondensing
----------------------------	--

Cooling	Convection, vents on top and side panels
---------------	--

Thermal dissipation

Transmitter	
Device	53.8 BTU/hr
Device and power supply...	63.7 BTU/hr

Receiver

Device	47.0 BTU/hr
Device and power supply...	52.6 BTU/hr

Mounting	
Rack mount.....	Yes, with optional rack shelf
Furniture mount	Yes, with optional under desk mounting kit
Enclosure type	Metal
Enclosure dimensions	
Transmitter	1.0" H x 8.7" W x 6.0" D (half rack wide) (2.5 cm H x 22.1 cm W x 15.2 cm D) (Depth excludes connectors.)
Receiver	1.0" H x 8.7" W x 6.0" D (half rack wide) (2.5 cm H x 22.1 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight	
Transmitter	2.3 lbs (1.0 kg)
Receiver	2.3 lbs (1.0 kg)
Shipping weight	
Transmitter	3 lbs (2 kg)
Receiver	3 lbs (2 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
Environmental.....	Complies with the appropriate requirements of RoHS, WEEE.
Warranty	3 years parts and labor

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

NOTE: Specifications are subject to change without notice.