

Fiber Optic Video/Data Transmitters and Receivers

Overview

S730DV and S7730DV fiber links convert analog video to digital video and support two-way mutiprotocol data transmission over one or two optical fibers. Digital transmission of the video component along with a signal-to-noise ratio >60 dB assures clean, noise-free video at the receiver. S730DV models feature multimode operation, while S7730DV models operate over single mode fibers. Both models support all major video formats.

Multiprotocol Data Formats

With multiprotocol data, it is not necessary to order or stock different models to support different data formats. Also, the forward data path (from Tx to Rx) can be set to function as a relay.

Data Translation

The data functions include the unique data translation feature, which allows one data format to be input and a different data for mat to be output. Data formats are selected during installation and can be easily changed in the field via rotary switch.

Superior Diagnostics

The SMARTS™ diagnostic technology provides an extensive set of built-in diagnostic tools including LEDs that provide a visual indication of the operating status of the equipment.

Standard Features

- One-way video and two-way multiprotocol data transmission over one or two fibers
- Single and multimode models available
- 10-bit video processing
- 560 TV lines video resolution
- Unique data translation function
- Field-selectable data format
- 18 dB (single mode) or 13 dB (multimode) optical budget
- Forward relay/contact closure 1 channel
- Supports all major data formats
- Meets or exceeds EIA/TIA-250C medium haul standard
- Standalone or rack configurations

Broadcast-Grade Single-Channel Video and Two-Way Multiprotocol Data

S730DV and S7730DV



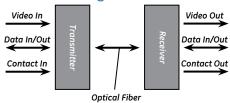




Specifications

Video	S730DV (Multimode)	S7730DV (Single Mode)
Channels	1 si	mplex
Format	NTSC and PAL	
Input/Output Signal	1.0 V pk - pk composite	
Bandwidth	7 MHz	
Signal-to-Noise Ratio	>60 dB	
Video Resolution	560 TV lines	
Input/Output Impedance	75 ohms	
Differential Phase	0.7°	
Differential Gain	2%	
Data		
Channels	1 duplex	
Formats	RS-232 (3-wire/5-wire), TTL, RS-422, RS-485 (2-wire/4-wire),	
· omate	Manchester, Biphase, SensorNet	
Baud Rate	250 kbps to 512 kbps (depending on data format)	
Relay/Contact Closure	1 simplex channel (TX to RX)	
Relay/Contact Rating	0.5 A at 30 VDC	
Bit Error Rate	<1.0E-9	
Optical	VI.UL 3	
Mode	Multimode	Single Mode
Optical Budget*	13 dB	18 dB
Emitter	LED	Laser
Wavelength	850 nm and/or 1300 nm	1310 nm and/or 1550 nm
wavelength	(depending on model)	(depending on model)
Operating Distance**	Up to 2.5 mi (4 km)	Up to 37 mi (60 km)
Operating Distance		
Launch Power	(depending on model) -15 dBm	(depending on model) -10 dBm
Receiver Sensitivity	-15 dBm -10 dBm	
Gain Control	Optical Automatic Gain Control (OAGC)	
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Electrical	47.51/00	. 16
Input Power, Standalone	13.5 VDC regulated (transmitter)	
Units	13.5 VDC regulated (receiver)	
Input Power, Rack Units	13.5 VDC regulated	
Current Requirement	650 mA	
Power Consumption	8 W	
Power Factor	6 (rack units only)	
Protection	Solid-state short circuit protection	
Power Supply	Model 613P (optional)	
Environmental		
Operating Temperature	-40 to 167 °F (-40 to 75 °C)	
Maximum Humidity	95% relative, noncondensing	
Mechanical		
Dimensions (LWD),	Transmitter 4.0" x 4.6" x 2.0" (102 x 117 x 51 mm)	
Standalone Units	Receiver 9.31" x 6.33" x 1.15" (237 x 161 x 29 mm)	
Dimensions, Rack Units	1 slot (1.0")	
Weight, Standalone Units	Transmitter 0.75 lbs (0.34 kg); Receiver 1.36 lbs (0.61 kg)	
Weight, Rack Units	0.6 lbs (0.27 kg)	
Construction	Aluminum (standalone and rack)	

Related Diagram



AGENCY COMPLIANCE

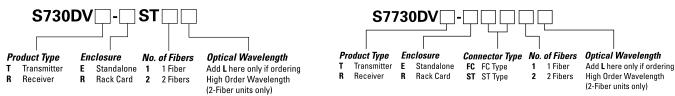


MADE IN THE USA

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

Ordering Information

Use the Configurators below to select the options available for these products.



^{*} Optical Budget based on 62.5 μm fiber, for 50/125 μm fiber subtract 3 dB.

