

Stratos

DVI Fiber Optic Extenders

Connectivity for
Business Critical Continuity™

DVI-LBA Series

Key Features & Benefits

- DViLiteBlok extends digital video signals up to 100m (3280ft) over a single 50µm multimode fiber
- Supports resolutions up to 1920 x 1200 @ 60Hz
- Supports DVI-D single link
- Detachable modules for easy assembly – no need to string connectors through conduit, walls, or ceilings
- Easy-learn EDID programming feature detects information from the display and stores it in EEPROM in the transmitter module
- Small form factor
- Signal transmission via 50µm or 62.5µm multimode fiber cable
- Secure data without RFI/EMI emissions or loss of video quality
- Power supply options: USB mini-plug to Type-A cable, wall plug, or PC DVI connection
- SC fiber connector
- Complies with Class 1M Laser eye safety in compliance with FDA/CDRH and IEC 60825-1

Product Overview

The **Emerson Network Power Connectivity Solutions** DVI fiber extension modules consist of a transmitter module and a receiver module, each with one SC type connector for the fiber input and a DVI-D single link plug for the video interface. Fiber extensions up to 100m (3280ft) are supported with 50µm multimode fiber which allows users the flexibility to custom fit the cable length to their specific application. The TDMS signals can be extended over 50/125 µm or 62.5/125 µm. The transmitter utilizes a four VCSEL array and the receiver utilizes four Pin-PD arrays to support transport capacity of up to WUXGA (1920 x 1200) at 60Hz. The EDID information is stored inside the transmitter and can be read and set by just plugging the TX module into the display device desired. The transmitter modules can be powered by either the +5 pin on the graphics card or by a USB interconnect. The receiver module is powered from a USB interconnect or with an optional 5VDC Power Pack.



Applications

- Digital Signage Extenders for Projectors and Digital Displays
- Medical Room Displays for Operating Centers
- Traffic Control or Airport Display Stations
- Kiosk Stations or Point of Presence Graphic Displays
- Corporate Board Rooms
- Auditoriums and Media Centers
- Class Room Training Centers
- Signboards for Streets or Stadiums
- Elevator Message Centers
- Command and Control Displays
- Public Gathering Information Stations
- Data Acquisition Displays for the Oil and Petroleum Industry
- Gas Station Signage
- Financial Institutions Digital Tracking Displays
- Banking and Merchandising Stores
- Cruise Line and Hotel In-Room Entertainment Centers

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Specifications

General Specification	
Input and Output Signals	TMDS Compliant with DDWG 1.0 standard
Data Transfer Rate	Max. of 1.65Gbps
Optical Link Power Budget	Min. 10.5dB
Mechanical Housing	2.25 in x 1.579 in x 0.590 in 57.15 mm x 40.11 mm x 14.99 mm
Connector Type – DVI	DVI-D Single Link Plug
Connector Type – Fiber	SC Type (both mating ends)
Fiber Cable Type	50/125µm Multi-Mode Glass Fiber 62.5/125µm Multi-Mode Glass Fiber
Laser Diode in TX Module	778-850nm Multi-Mode VCSEL
Photo Diode in RX Module	GaAs PIN-PD
Storage Temp.	-40 to +85°C
Voltage Supply Range	+3.45V to +5.5V
Operating Voltage	3.3V (regulated)
Supply Current	150mA Typical
Relative Humidity	8 to 80%
Electrostatic Discharge	2kV
Operating Ambient Temp. Range	0 to +70°C
Input Differential Impedance TX	100Ω
Data Rate Per Wavelength	1.65Gbps per DDWG 1.0 Specification
Differential Input Voltage TX	200 – 2000 m V p-p
Single-ended Input Voltage TX	100 – 1000 m V p-p
CM Input Voltage (AC Coupled)	2.6V
Electrical Output RX	650mV Typical
Low Frequency Cutoff RX	175kHz
Peak Optical Power Per Channel	-2.0dBm
Optical Modulation Amplitude Per Channel	300µW
Wavelength Range	812.5nm nominal (avg. 4 wavelengths)
Optical Rise/Fall Time	200ps
Resolution Supported	
VGA up to WUXGA (1920 x 1200)	
Up to 1920 x 1080i (HDTV)	

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Shipping Information

	Part number	Description	Shipping Dimensions	Shipping Weight
	DVI-LBA-PKG-SC	DVI Fiber Extender Package includes: Transmitter, Receiver, SC-SC Multimode Jumper Cable, and a USB to Mini-B Cable.	12.25 x 12.25 x 6.0 in 31 x 31 x 16 cm	2.0 lb (885 gm)
	DVI-LBA-TX-SC	DViLiteBlok Transmitter, SC, Multimode		1.3 lb (590 gm)
	DVI-LBA-RX-SC	DViLiteBlok Receiver, SC, Multimode		
	PWR-US-USB	US Power Supply to Mini-B Plug, Input 110-254 VAC, Output 5VDC, 5ft, 1.5m		
	PWR-EU-USB	European Power Supply to Mini-B Plug, Input 110-254 VAC, Output 5VDC, 5ft, 1.5m		1.2 lb (556 gm)
	PWR-UK-USB	U.K. Power Supply to Mini-B Plug, Input 110-254 VAC, Output 5VDC, 5ft, 1.5m		
	PWR-USB-AMB	Cable USB Type A to Mini-B Plug, 3.3ft, 1m		
	710-00248-01	SC-SC Multimode Jumper Cable, 3.3ft, 1m		

For more information on these products consult the DVI-LBA series data sheet.

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