

Description

Built upon OptixCom's optical transceiver technology, the DVI extender module is optimized for sending and receiving high definition video signals. Proprietary digital design is utilized to ensure video transmission over fiber with minimum distortion and interference.

This module is optimized for DVI video signals using 1310 nm laser and singlemode fibers (SMF). Standard DVI and four LC interface connectors are built in for easy installation. It is designed to send signals from the TX module to the RX module in a one-way direction.

This optical DVI extender supports up to 1920 x 1080 resolution and 5 km distance with standard 9/125 um singlemode optical fibers.



DVI-LCTX-5K-1
DVI-LCRX-5K-1



~ Fiber cables not included ~

Key Features

- 1310 nm technology with LC singlemode fibers
- Up to 1920x1080 resolution and 5 km distance
- DVI-D single link
- Pseudo DDC for EDID support*
- Not HDCP compliant
- 100 – 240 VAC to 5 VDC power supply included
- RoHS compliant, CE and FCC approved
- Compact size: 90 x 40 x 20 mm

* Virtual EDID data structure is incorporated inside the TX module to provide pseudo monitor ID to the host computer. This virtual EDID data enables the display to support various video modes such as VGA, SVGA, ... and SXGA.

Applications

- ✓ PC to monitor
- ✓ DVD or video game player to LCD TV
- ✓ Video surveillance link
- ✓ Remote monitor for warehouse and control
- ✓ Home entertainment systems

Ordering Information

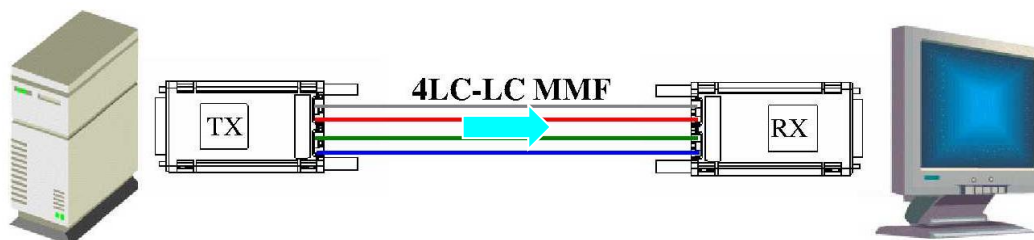
Part Number: DVI-LCTX-5K-1

Optical DVI TX module, 1310 nm, 5 km, -10-50°C

Part Number: DVI-LCRX-5K-1

Optical DVI RX module, 1310 nm, 5 km, -10-50°C

System Application Example



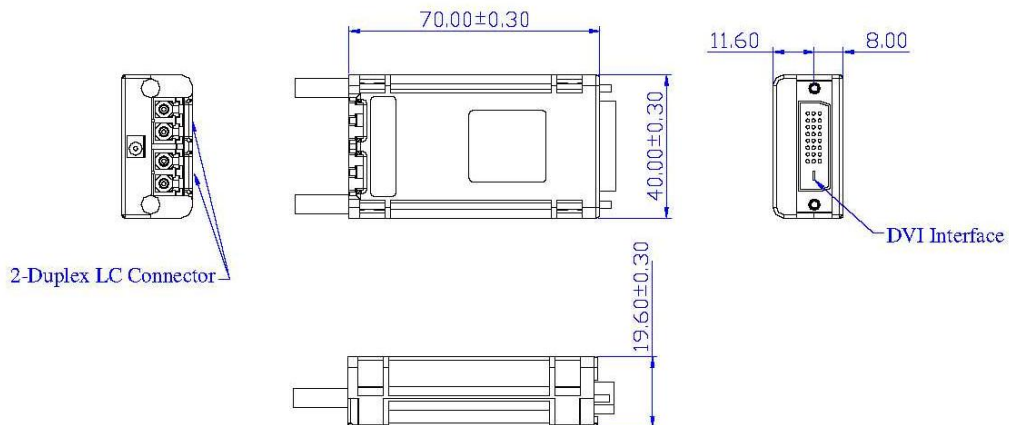
Operating Conditions

Parameter	Min.	Typical	Max.	Units
Operate Temperature	-10	25	50	°C
Storage Temperature	-20	25	75	°C
Supply Current (TX)	---	350	400	mA
Supply Current (RX)	---	250	300	mA

Video Resolution v.s. Transmission Distance

Display	Resolution	Distance (m) with 9/125 μ m SMF
TV 1080p	1920 X 1080p (16:9)	5,000 m
SXGA	1280 X 1024 (5:4)	5,000 m
XGA	1024 X 768 (4:3)	5,000 m
TV 1080i	1920 X 1080i (16:9)	5,000 m
TV 720p	1280 X 720p (16:9)	5,000 m
SVGA	800 X 600 (4:3)	5,000 m

Mechanical Dimension



Package List

- 1.DVI-LCTX-5K-1 optical DVI TX module - 1 unit
- 2.DVI-LCRX-5K-1 optical DVI RX module - 1 unit
- 3.5V AC/DC power supply - 2 units
- 4.LC fiber cables – not included and ordered separately.

Installation Procedure

- 1.Install four LC fiber cables into the TX and RX modules. Match the number (1,2,3,4) of the TX to RX modules on the same fiber cable to establish a complete TX-RX link.
- 2.Connect power supply to the AC power outlet and to the RX module first. Do not connect the other power supply to the TX at this time because TX power may be supplied by the PC graphic card via the DVI connection.
- 3.Plug the TX module to the DVI connector interface of the video source (PC, DVD player ...).
- 4.Plug the RX module to the DVI connector interface of the display device (monitor).
- 5.Turn on the video source and display device. If there is no display, try to install the power supply to the TX module.
- 6.Adjust the display resolution for best viewing.