

DVI Extender via 4 fiber channel LC Duplex Connector Extends DVI connection up to 500 meters



Description

DVI (Digital Visual Interface) recently becomes an popular interface between monitor and PC. Electrical signal limits the transmission length and quality. APAC DVI extender helps DVI to transmit far away via optical fiber.

Features

- Long distance image transmission
- High resolution and image quality
- No RF Interference by optical fiber
- Class 1 laser product complies with EN 60825-1
- DVI-D single link
- CE and FCC approved

Application

- Remote monitor for traffic, industrial, military control
- LCD, Projector, Plasma display connection
- Large video wall system
- Multi-monitor for Advertising

Ordering information

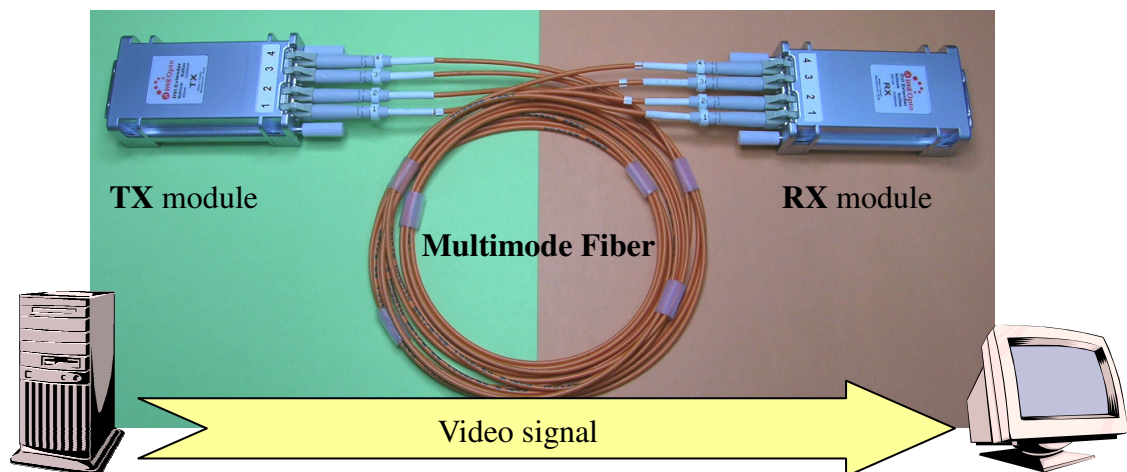
Part Number

DVI500-4LC-TX Transmitter (TX)

DVI500-4LC-RX Receiver (RX)

* This product do not include optical fiber

Application Note



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Specification

PARAMETER	SPECIFICATION	NOTE
Max length	500M @ XGA	62.5/125 MMF 4-LC
	700M @ XGA	50/125 MMF 4-LC
Max resolution	1920 × 1200	Single link
Max DVI bandwidth	1.65 Gbps per channel	
EDID support	Pseudo DDC	Customers optional
HDCP compliant	No	
Operating voltage	5VDC	
Supply current	180mA±30	TX module
	280mA±30	RX module
Optical property	4 channels 850nm @ -6dBm	VCSEL
Operating Temperature	-0°C to 50°C	
Storage Temperature	-20°C to 75°C	
Dimension	TX unit : 90 × 40 × 19.6	L × W × H (mm)
	RX unit : 90 × 40 × 19.6	
Weight	TX unit : 65g ; RX unit : 65g	

Adaptor Specification

PARAMETER	SPECIFICATION	NOTE
Input	100~240VAC	0.2A 50~60Hz
Output	DC 5V	1.0 A
DC Jack	Inside 5V / Outside ground	

Resolution and Distance Reference

Resolution Mode	Maximum Distance	NOTE
UXGA (1600×1200)	300m (62.5/125) / 500m (50/125)	1.65Gbps
SXGA (1280×1024)	400m (62.5/125) / 600m (50/125)	1.25Gbps
XGA (1024×768)	500m (62.5/125) / 700m (50/125)	
SVGA (800×600)	500m (62.5/125) / 700m (50/125)	
VGA(640×480)	500m (62.5/125) / 700m (50/125)	250Mbps

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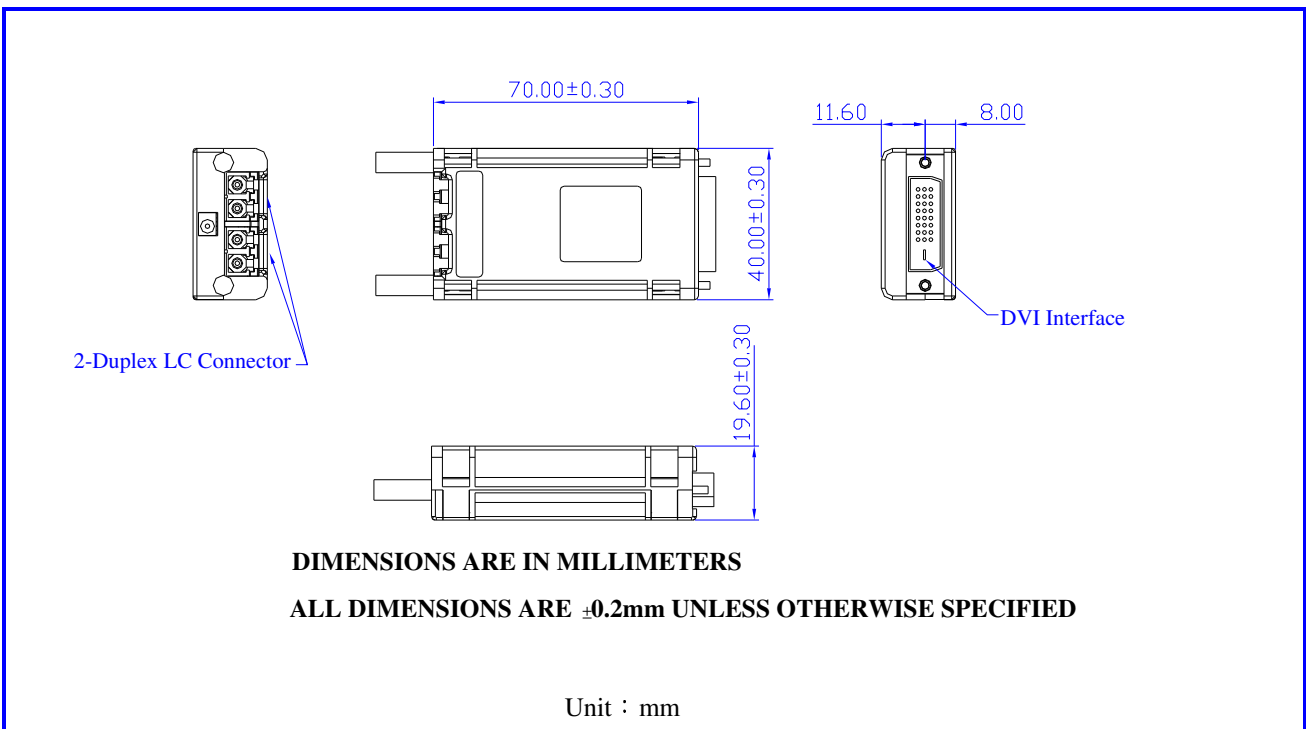
Requirements

- DVI PC or DVI signal source (Transmitter)
- DVI Monitor or Projector (Receiver)
- 100~240VAC 50~60Hz 0.2A

Pseudo EDID support

There is virtual EDID data structure in TX module. This provides pseudo monitor information to the host. Then host can work at different modes by reading this data. It supports all standard modes such as VGA, SVGA, XGA, SXGA and UXGA...etc.

Dimensions



Safety Regulation

CE and FCC approved.



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Installation

Important: Please use the installation procedure below. Improper, or no operation may result if the start-up sequence is not correctly followed.



Figure 1 – Single Monitor

Step 1

Carefully unpack the contents of the shipping group. Check the following items:

- TX module × 1
- RX module × 1
- AC/DC Adaptor × 2
- Plug converter × 2 (Optional)

Step 2

Connect each duplex LC fiber cable one by one as indicated number. The channel “1” of TX corresponds to channel 1 of RX. The other channels are the same connection.

Step 3

Connect the AC/DC adapter to the RX module.

Neglect AC/DC adapter to the TX module. The PC may supply voltage source via DVI receptacle.

Step 4

Plug directly the TX module in the DVI receptacle of PC. Do **NOT** use any intermediate cable or adapter between them.

Step 5

Plug the RX directly module in the DVI receptacle of display. Do **NOT** use any intermediate cable or adapter between them.

Step 6

Power on the PC and display.

Note1 : The set-up of screen might be fitted to the display resolution. It is certain to happen such unfitness if it is first time to boot up in using this extender module. Then, go to Display Properties

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in Windows systems and click the tap of Settings. Then you can set the right display resolution to meet your display. Once you set the right resolution, you could see displaying the initial screen at the same resolution as just before you powered on.

Note2 : You might not use the AC/DC adapter at TX module, but use the power supplied through a DVI pin from the graphic cards. After completing the installation instruction, if the system doesn't work properly, you could re-connect the AC/DC adapter while all powers for the system are ON.

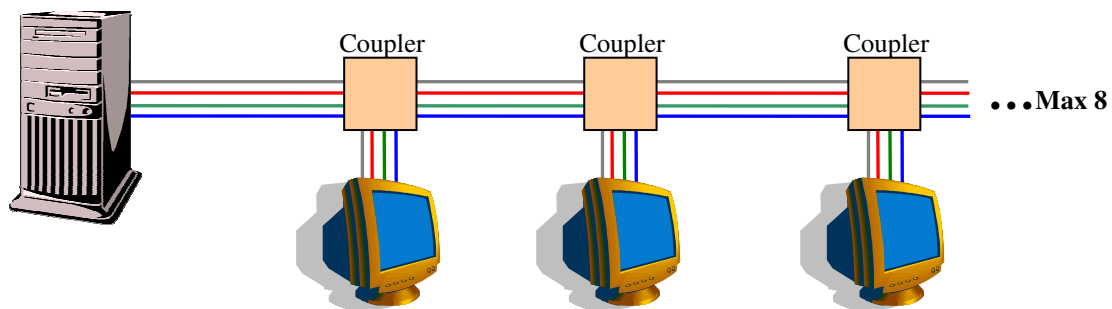


Figure 2 – Multi-Monitor