



Optical DVI Dual Link Extension Module

Stretch DVI Dual Link (M1-2R2VI-DU)

Ver. 1.1

Description

The M1-2R2VI-DU DVI Module is a new member of the Opticis family of products that stretches your DVI connectivity. Differently from others, it offers a fiber-optic long-distance extension of dual link DVI connectors. DDC connection is implemented over a UTP cable with RJ-45C, which makes it easier to install.

The reality of high-speed digital graphic interconnections mandates products to maintain video quality and cost effectiveness of integrated display systems. Optical technology for gigabit digital transmission makes it simple to extend digital graphic data above the extension limits of copper wires providing pure signal integrity for an ideal visual experience, no EMI/RFI emissions, light weight, rugged cabling and connectors, low power consumption and installation ease.

The extension system consists of transmitter and receiver module boxes with female dual link DVI-D plugs, being able to connect PCs (Media Receiver) and displays (Monitor or HDTV) by dual link DVI-D copper cables respectively. 3 duplex LC patch cord fiber cables enable to transmit graphic data, 7 channels of dual links including a clock and a UTP cable with RJ-45C plugs enables to manage power and EDID/HDCP parameters. Internally, Opticis optical technology - the transmitter's 850nm VCSEL array and the receiver's Pin-PD array, are concealed within the connector housings.

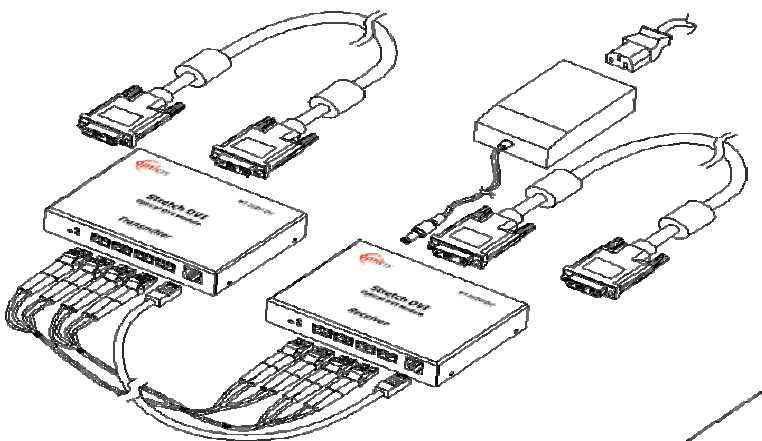


Features

- ◆ Support up to 2,560x1,600 resolution at 60Hz refresh rate.
- ◆ Fiber-optic cables with 8 LC or 4 duplex LC fiber connectors are required to transmit Red, Green, and Blue, 3 channels for each link and one clock.
- ◆ Extension distance is 100 meters (328 feet).
- ◆ Light weight detachable cables with secure connectors for fiber and copper.
- ◆ No software to install - plug & play simplicity.
- ◆ Low EMI/RFI emissions and inherent fiber data security.

Applications

- ◆ Medical, military, aerospace, factory, and traffic control integrated digital display systems
- ◆ Digital TFT-LCD and plasma flat panel displays and projectors for conference room, auditorium and kiosk systems.
- ◆ Color LED signboards and panel information displays for airports, stadiums and outdoor advertising.
- ◆ Digital Home Theatre Systems

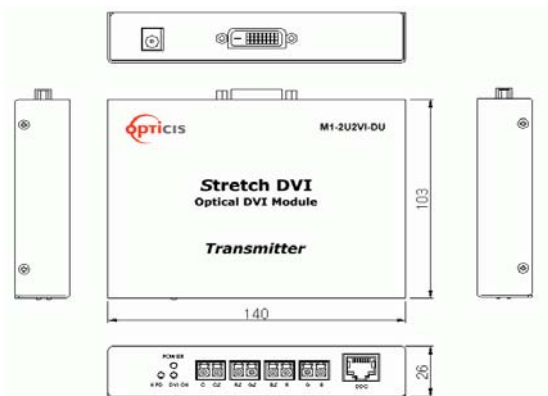


Optical DVI / HDMI Extension Module (M1-2R2VI-DU)

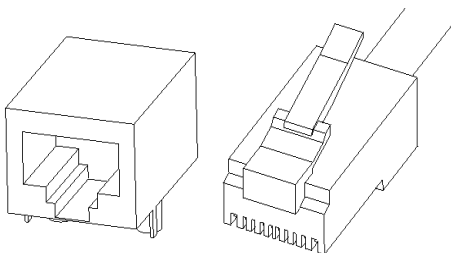
DC Power Supply for Modules
M1-2R2VI-DU includes a universal 100-240VAC 50/60Hz external AC/DC adapter to power the transmitter and receiver housings.
Compliance with International Standards
M1-2R2VI-DU is designed and tested to meet the requirements of the world product standards for material specifications, RFI/EMI emissions, and electrical safety.

Drawings

Dimension [mm]



Connector types of DDC cable



(Receptacle and plug of RJ-45C)

Ordering Information

Model number: M1-2R2VI-DU

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Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Units
Ambient Operating Temperature	T _A	0	25	+ 50	°C
Storage Temperature	T _s	-30		+ 70	°C
Storage Humidity	H _s	10		85	RH%

Electrical Power Supply Characteristics

(T_A = 0 °C to +50 °C, unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Units	
Supply Voltage	V _{CC}	4.5	5	5.5	V	
Supply Current	TX	I _{TCC}	-	170	200	mA
	RX	I _{RCC}	-	130	150	mA
Power Dissipation	TX	P _{TX}		0.85	1.1	W
	RX	P _{RX}	-	0.75	0.825	W

Terminology:

- VESA** Video Electronics Standards Association
- DDC** Display Data Channel. Latest specification is DDC2B
- EDID** Extended Display Identification Data. EDID parameters are sent over the DDC link.
- DVI-D** Digital Visual Interface. Digital connection only – no analog.
- HDMI** High Definition Multimedia Interface. Support High-Definition Video and Multi-channel Audio.
- HDCP** High-bandwidth Digital Content Protection. These parameters are part of the 2002 High Definition Multimedia Interface (HDMI) specification for Consumer Electronics.

Shipping Group;

- + 1ea x dual DVI Transmitter Module
- + 1ea x dual DVI Receiver Module
- + 2ea x dual DVI Copper Cable (1.0m)
- + 1ea x Power supply Adapter (100-200VAC 50/60Hz)
- + 1ea x AC Cord (US Type or EU type)
- + 1ea x User Manual

