



Features

- Input is DVI-D (HDCP / HDMI compatible)
- Extends graphics resolutions up to 1920x1200/60Hz and video up to 1080p/60Hz
- Built in uncompressed fiber connectivity
- HDCP V1.2 compliant. HDCP over DVI
- Singlemode operation up to 10 km
- Multimode operation up 305m using OM3 fiber
- Limited wiring for small spaces

Applications

- Medical OR Integration / Endoscopy
- Airport / Train / Information Displays
- Digital Signage
- Security / Surveillance
- Hotel in-room entertainment centers
- Classrooms

Fiber to the Monitor: Internal Receiver Module

EMCORE's VX-1DVI-SA is an internal optical module that can receive one channel of uncompressed DVI video up to 10 km from any source over fiber. The receiver works with either standard multimode or singlemode fiber using an LC type connector. LC "latched" connectors are the smallest and most widely used type. The VX-1DVI-SA is the most economical solution for receiving a single channel of digital video over long distances.

The VX-1DVI-SA has true plug and play capabilities. It can extend video resolutions up to 1080p/60Hz and graphic resolutions up to 1920x1200/60Hz over a single fiber.

No more EDID learning or blanked out screens. Critical EDID information is read directly from the monitor and passed directly to the graphics card. The VX-1DVI-SA is HDCP compliant, allowing the exchange of keys between the source and display so that copyrighted material can be sent over the fiber link.

The FTTM (Fiber To The Monitor) solution is compatible with VX Pro DVI and HDMI transmitters, as well as Optiva OTX DVI and HDMI transmitters. The DVI module was designed to support both embedded audio and HDCP. It is also compatible with EMCORE's HDMX, a High Definition Multimedia Matrix.



VX-1DVI-SA

Fiber To The Monitor: Internal Receiver Module

DATASHEET **FIBER OPTICS**

Ordering Information (Receiver Only)

Models	Description
VX-1DVI-SA-SM	Singlemode fiber input & LC connector
VX-1DVI-SA-MM	Multimode fiber input & LC connector
VX-1HDMI-SA-SM	Singlemode fiber input & LC connector
VX-1HDMI-SA-MM	Multimode fiber input & LC connector

■ "-SM" for Single Mode fiber, and "-MM" for Multi-Mode fiber

Supported Video Resolutions

Supported Resolutions		Supported Resolutions	
640 x 480	VGA	1280 x 960	SXGA- (UVGA)
480i / 480p		1280 x 1024	SXGA
720 x 576		1360 x 768	WXGA (HD)
576i / 576p		1366 x 768	WXGA (HD)
768 x 480	WVGA	1400 x 1050	SXGA+
800 x 600		1440 x 900	WXGA+
854 x 480		1600 x 900	WSXGA (HD+)
960 x 600		1600 x 1000	
960 x 1200		1600 x 1024	WSXGA
1024 x 600	WSVGA	1600 x 1200	UXGA
1024 x 640		1600 x 1280	
1024 x 768	XGA	1680 x 1050	WSXGA+
1152 x 864	XGA+	1792 x 1344	
1280 x 720	WXGA	1856 x 1392	
720p		1920 x 1080	UXGA
1280 x 768	WXGA	1080i / 1080p	FHD
1280 x 800	WXGA	1920 x 1200	WUXGA

■ All VESA resolutions supported.

Interface



Video Capability

Specifications	Values
Max Resolution	1920 x 1080p @ 60Hz
Connector	Single Link DVI-D (18 pin male)
Input Voltage	5V DC
Power Consumption	2.5W Max.
Power Connector	Mini USB
Response Time	<8ms (Gray to Gray)

Optical Specifications

Fiber Type "XX"	Wavelength (nm)	Data Rate	Distance (km)
SM	1490/1550/1310	6.25 Gbps	10
MM	850/1310/1550	6.25 Gbps	0.3

General

Specifications	Values
Dimensions	1.58" x 2.26" x 0.57"
Weight	3.12 oz.
Operating Temperature	0°C to +50°C
Storage Temperature	20°C to 85°C
Humidity	10 to 95% (non-condensing)
Fiber	1 (multimode or singlemode)
HDCP Compliance	v1.2
EDID	Plug & Play
Warranty	1 Year

Compliance

