an emcore company

opticomm

travel by light®

OTS-1DVI2A

Optiva® Standard, DVI/VGA/RGBHV

DVI (Single-Link & Dual-Link), Analog VGA, RGB-HV and Analog Audio transport over a single fiber, single wavelength

1 Video

2 Audio

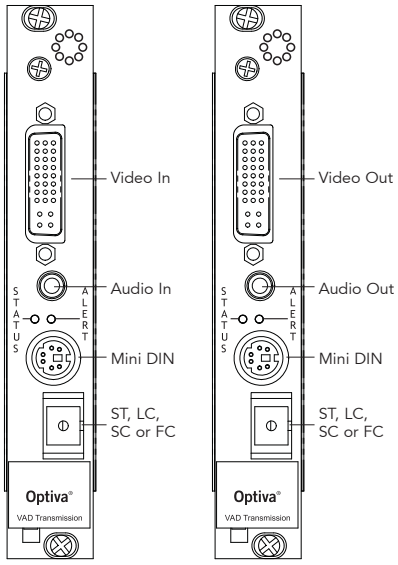
Data

Opticomm's OTS-1DVI2A is the perfect solution for transmitting the full range of VESA and SMPTE compliant video resolutions over long or short distances with a single wavelength. Other systems simply do not offer as wide of a range of signals and resolutions over a single wavelength. This single fiber, single wavelength solution is perfect for any professional audio/visual application such as remote digital theaters, video conferencing, concerts and other similar applications like electronic billboards and sports arena screens. In addition to DVI, VGA and RGB-HV transmission, Stereo Audio is also supported on the same fiber. Optiva® was designed to maintain a quality uncompressed signal and as always, the resolution you input is the resolution that we output. The OTS-1DVI2A lets you input DVI and output VGA or vice-versa, the choice is yours! Switching and multicasting the OTS-1DVI2A over the OptiLinx® Switching Platform is quick and simple, making this solution perfect for large-screen, high-resolution digital presentations allocating only one fiber to each display.

System Design

The OTS-1DVI2A comes in a standard Optiva® insert card form factor (See pg. 2 for dimensions). These cards fit easily into our 3RU rack mount enclosure or stand alone desktop enclosures. The desktop enclosures can hold 1, 2 or 4 cards, creating compact, mountable, stand-alone systems, while the rack-mount enclosure can accommodate up to 16 insert cards.

The use of separate enclosures allows for future flexibility and expansion as all cards are hot-swappable and can be used in any enclosure. Each one of our card housing units operate with an appropriate power supply.



OTS-1DVIT2AT **OTS-1DVIR2AR**

Features

- Optiva® patent-pending Daisy-Chain™ Technology
- Multimode or singlemode options (up to 70 km over one fiber)
- Supports DVI resolutions up to 2048x1536
- Supports VGA resolutions up to 2048x1536
- Supports component video up to 1080p
- H & V Sync Frequency range of 60 to 85 Hz (vertical)
- Uses all-digital processing for crystal clear picture with no compression
- Real-time video transmission for exceptional quality and resolution
- Standard DVI-I video connector with HD-15 adapter is included for RGB/VGA interface
- 1RU rack-mount version also available

Models Available

Wavelength (nm) & Fiber	Transmit*	Receive*	Data Rate (Gb/s)	Optical Connector	Optical Budget (dB)	Range** (km)	Form Factor
850 Multimode	OTS-1DVIT2AT-C0-XX-IC	OTS-1DVIR2AR-C0-XX-IC	3.125	ST, FC, LC or SC	5	0.5	IC (1-slot)
1310 Multimode	OTS-1DVIT2AT-C1-XX-IC	OTS-1DVIR2AR-C1-XX-IC	3.125	ST, FC, LC or SC	7	1.5	IC (1-slot)
1310 Singlemode	OTS-1DVIT2AT-C2-XX-IC	OTS-1DVIR2AR-C2-XX-IC	3.125	ST, FC, LC or SC	7	10	IC (1-slot)
1310 Singlemode (D)	OTS-1DVIT2AT-C2D-XX-IC	OTS-1DVIR2AR-C2D-XX-IC	3.125	ST, FC, LC or SC	12	20	IC (1-slot)
1550 Singlemode	OTS-1DVIT2AT-C3-XX-IC	OTS-1DVIR2AR-C3-XX-IC	3.125	ST, FC, LC or SC	17	40	IC (1-slot)
1550 Singlemode (D)	OTS-1DVIT2AT-C3D-XX-IC	OTS-1DVIR2AR-C3D-XX-IC	3.125	ST, FC, LC or SC	25	60	IC (1-slot)
1270-1610 SM (CWDM)	OTS-1DVIT2AT-C4-XX-IC	OTS-1DVIR2AR-C4-XX-IC	3.125	ST, FC, LC or SC	Varies	20-70	IC (1-slot)

* XX indicates the type of optical connector. Each of ST, FC, LC or SC are available.

** Chromatic dispersion and additional losses should be taken into account.

Video Resolutions Supported*

VGA Resolutions		Max Refresh (Hz)
600x480	VGA	85
800x600	SVGA	85
1024x768	XGA	85
1280x720	WXGA	85
1280x1024	SXGA	85
1400x1050	SXGA+	75
1600x1200	UXGA	75
1920x1200	WUXGA	75
2048x1536	QXGA	60
Note: supports all standard VESA resolutions.		
DVI (SL and DL Resolutions)		**Max Refresh (Hz)**
600x480	VGA	85
800x600	SVGA	85
1024x768	XGA	85
1280x720	WXGA	85
1280x1024	SXGA	85
1400x1050	SXGA+	75
1600x1200	UXGA	75
1680x1050	WSXGA+	75
1920x1200	WUXGA	75
2048x1536	QXGA	60
Component Video Resolutions		**Max Refresh (Hz)**
480i		60
480p		60
720p		60
1080i		60
1080p		60
Note: supports all standard SMPTE resolutions for component video		

*Higher resolutions utilize selective refresh technology. A higher bandwidth version (Model OTS-1HDVI) is available for high-grade Dual Link DVI applications.

Video

Resolutions	See chart above
Connector	DVI-I (DVI to VGA adapter included)
Color Depth	24-Bit

Audio

Channels	24-Bit Stereo Audio
Audio In/Out Impedance	47k Ohm Unbalanced or 600 Ohm Balanced
Audio In/Out Level	6 dBm (differential) single-ended; 2.5V p-p
Frequency Response	20 Hz to 20 KHz (±0.1 dB)
Signal to Noise Ratio	> 85 dB @ 1 kHz (weighted)
Total Harmonic Distortion	< 0.1% @ 1 KHz
Connector Type	1/8" stereo headphone jack or 6-pin mini DIN (for differential)

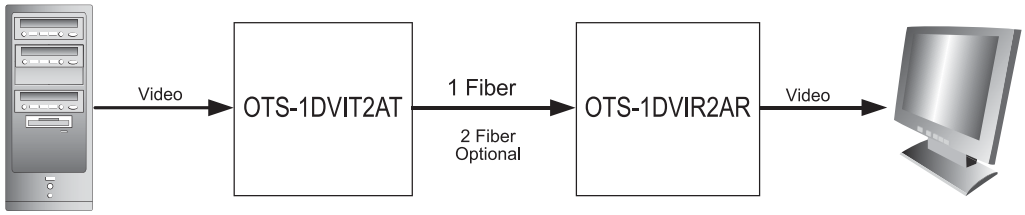
General

Dimensions & Weight	Insert Card (IC): 6.3"L x 0.8"W x 4.0"H 11 oz.
Operating Temperature	0° C to +50° C
Storage Temperature	-30° C to +85° C
Humidity	0 to 95% non-condensing
Power Consumption	< 8W

Local Monitoring Front panel LED status indicators and push buttons

Remote Monitoring & Control Compatible with OptivaView™ SNMP Management Suite

Sample Configuration



Optiva™ Configurable Communication Platform
Network Management
SDI & HD-SDI
Composite Video, Audio & Data
RGB/VGA/DVI
Audio/FSK/Intercom
Data (Ethernet/Serial/USB)
CATV/RF & L-Band
Optical Switching, Routing & Redundancy
Passive Multiplexing Solutions
Enclosures, Racks & Frames
Power Supplies & Accessories

ISO 9001:2000 CERTIFIED

CE

FCC PART 15 COMPLIANT

MADE IN THE USA