

# OTP-1DVI2A1D1KM

DVI / VGA / RGBHV / RGB, Analog Audio, RS-232 & KM



DATASHEET

FIBER OPTICS



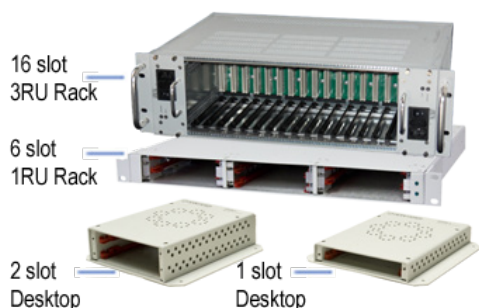
## Features

- Format conversion: D-to-A or A-to-D
- RS-232 Serial Data & Keyboard/Mouse
- Multimode or singlemode fiber options (up to 70Km over one fiber)
- Supports single / dual link DVI resolutions up to 2560 x 1600
- Supports VGA resolutions up to 1920x1200
- Supports component video (RGBHV / RGB)
- H & V sync frequency range of 60 to 85 Hz
- 3.5 mm audio connector
- 3-Year warranty

## Applications

- Digital signage / remote kiosks
- Control room
- Digital cinema

## Enclosure Options



## DVI with Audio & Serial Data Transmission over Fiber

The Optiva OTP-1DVI2A1D1KM provides for the transmission of 1 channel of single- or dual-link DVI video and 2 channels of analog audio, 1 channel of RS-232 serial data and keyboard/mouse, over long or short distances, using a single fiber.

In addition, the OTP-1DVI2A1D1KM is part of our innovative Optiva video, audio and data media transport system. Optiva was designed to maintain lossless fiber extension between input and output signals. New signals may be added without the need for additional fiber through our proprietary daisy-chain technology. The Optiva line of products also includes insert cards for up to 16 channels of multiplexing / demultiplexing, 16x16 matrix switching, optical add/drop, as well as remote system monitoring.

## System Design

Optiva insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosures

**optiva** PLATFORM

(Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. Also available in the rackmount form factor is our 1RU enclosure (Model: OT-CC-6-1U) which can accommodate six insert cards and utilizes two 60 watt power supplies. For desktop or wall mounting applications there are one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures. Both use an external wall mount power supply.

VGA	DVI	RGBHV	Resolutions		Max Refresh Rate (Hz)
•	•		640 x 480	VGA	85
		•		480i / 480p	30 / 60
•	•		800 x 600	SVGA	85
•	•		1024 x 768	XGA	85
•	•		1280 x 720	WXGA	85
		•		720p	60
•	•		1280 x 1024	SXGA	85
•	•		1400 x 1050	SXGA+	75
•	•		1600 x 1200	UXGA	60 (VGA), 75 (DVI)
•	•		1680 x 1050	WSXGA+	60
•	•		1920 x 1080	UXGA (1080p)	60 (VGA), 75 (DVI)
		•		1080i / 1080p	30 / 60
•	•		1920 x 1200	WUXGA	60 (VGA), 75 (DVI)
	•		2048 x 1536	QXGA	60
	•		2560 x 1600	WQXGA	60

■ Some Resolutions utilize Reduced Blanking Technology

U.S. Patent #'s 7720385 & 8064773

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### Ordering Information

Transmitter	Receiver
OTP-1DVI2AT1DTR1KMTR-XX/XX-YY	OTP-1DVIR2AR1DRT1KMRT-XX/XX-YY
OTP-1DVI2AT1DTR1KMTR-L4x3/L4x3-LC	OTP-1DVIR2AR1DRT1KMRT-L4x3/L4x3-LC

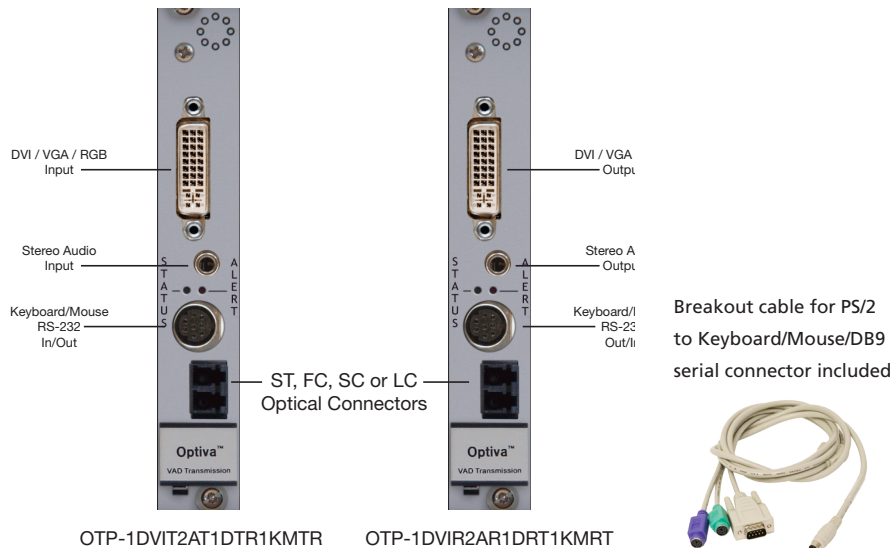
- When ordering, replace "XX/XX" with one of the optical codes specified below
- When ordering, please substitute the "YY" in the model for one of the following optical connectors: ST, FC, SC, or LC
- Standard connector type is UPC
- NOC: non-optical card

### Optical Specifications

Optical Code	Fiber Type	Wavelength (nm)	Optical Budget (dB)	Distance (km)
C0/C0	Multimode	850/850	7	0.2
C1/C1	Multimode	1310/1310	5	0.8
C2/C2	Singlemode	1310/1310	7	10
C2D/C2D	Singlemode	1310/1310	12	20
C2H/C2H	Singlemode	1310/1310	25	60
C3/C3	Singlemode	1550/1550	17	40
C3D/C3D	Singlemode	1550/1550	25	60
C1/C3M	Multimode	1310/1550	5	1.5
C2/C3	Singlemode	1310/1550	12	20
C2/C3D	Singlemode	1310/1550	17	40
C2/C3H	Singlemode	1310/1550	25	60
L4x3/L4x3	Singlemode	1270/1610 (CWDM)	25	20-70

- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distance may require attenuation

### Connection Diagram



OTP-1DVI2AT1DTR1KMTR

OTP-1DVIR2AR1DRT1KMRT

### Video

Specifications	Values
Standards	DVI 1.0/VESA
Resolutions	(see chart on front side)
Connector	DVI-I (VGA adapter available)
Color Depth	24 Bit
VGA Video Bandwidth	780 MHz
Analog Video Output Level	1V p-p
Video Signal-to-Noise Ratio	>55 dB

### Audio

Specifications	Values
Channels	24-Bit Dual Channel
Impedance	47k Ohm Unbalanced
Audio Levels	2V p-p Max
Frequency Response	20 Hz to 20 KHz (±0.1 dB)
Signal-to-Noise Ratio	> 85 dB @ 1KHz (weighted)
Total Harmonic Distortion	< 0.1% @ 1KHz
Connector Type	1/8" Stereo Headphone Jack

### Data

Specifications	Values
Connector Type	Tx: 9-Pin DIN (P/N: 5526-532) Rx: 8-Pin DIN (P/N: 5526-531)
Serial Data (DB-9, RS-232)	Up to 250 Kbp/s
Keyboard/Mouse	PS/2

### General

Specifications	Values
Dimensions (Insert Card)	6.3"D x 0.8"W x 4.0"H
Weight	11 oz.
Operating Temperature	0° to +50°C
Storage Temperature	-30°C to +85°C
Humidity	0 to 95% (non-condensing)
Power Consumption	~8 Watts
Warranty	3 Years

### Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators
Remote	OptivaView SNMP Management Suite*

- \* Requires OptivaView SNMP Controller Card (Model: OPV-CTLR)

### Compliance

