Overview

The VT1500WDM-Kalatel video transmitter and data receiver module is designed for use in the Kalatel Cyberdome™ dome system with Cybermount™ side conduit entry. This module allows the dome camera to be connected directly to optical fiber, providing a fully integrated solution. This unit mounts directly into the dome's wallmount, replacing the traditional power, data and coaxial cable connection within the arm. The IFS VT1500WDM-Kalatel allows for the simultaneous transmission of video and one-way data over one optical fiber. The unit supports the RS-422 data protocol that Kalatel utilizes for camera pan, tilt and zoom control. The unit also has a contact closure input for adding a device such as a dome tamper switch or alarm input, enabling a signal to be transmitted back to the monitoring location.

The optical output of the dome is compatible with the standard IFS VR1500WDM receiver or VR1500WDM-CC, and is designed for quick and easy installation into the Cybermount™ side conduit entry arm and utilizes one multimode optical fiber. In addition, the VT1500WDM-Kalatel transceiver is designed to be an integral part of the Cyberdome™ system, there are no external electrical connections, the fiber module requires no external power source and no additional hardware at the camera site.

Standard Features

• AM Video Transmission

• NTSC, PAL Compatible

• Supports Kalatel RS-422 Data Interface

• Transparent to Data Encoding

• Full Range Automatic Gain Control (AGC)

• No External Power Supply Required

• No In-field Electrical or Optical Adjustments Required

• Integrated WDM for Greater Product Reliability

• Distances up to 2.5 miles (4 km) without Repeaters

• Available in FiberPak™

• Comprehensive Lifetime Warranty

Video with One-Way Data and Contact Closure

Designed for use in the Kalatel Cyberdome™ dome system with Cybermount™ side conduit entry.
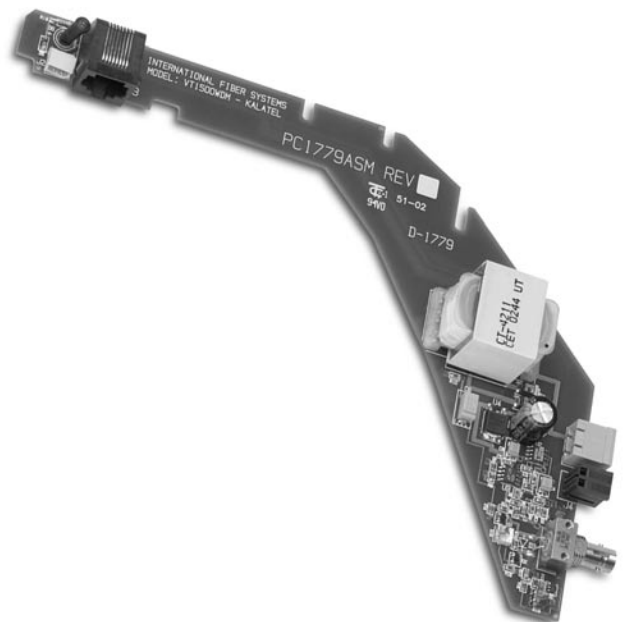
imagination at work

Specifications

Video

Video Output:	1 volt pk-pk (75 ohms)
Bandwidth:	5 Hz - 10 MHz (At 6 dB attenuation)
Differential Gain:	<5%
Differential Phase:	<5°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	>55 dB @ 10 dB attn.

Data

Data Interface:	RS-422

Wavelength

850/1310 nm, Multimode

Number Of Fibers

VT1500WDM-KL, VR1500WDM, VR1500-CC: 1

Connectors

Optical:	ST
Power, Heater Power and CC:	Terminal Block with Screw Clamps
Data:	RJ-45

Electrical & Mechanical

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Power:	
VT1500WDM-Kalatel:	24 VAC
VR1500WDM:	12 VDC
VR1500WDM-CC:	12 VDC
Circuit Board:	Meets IPC Standard
Shipping Weight:	< 1/2 lb./.23 kg

Environmental

MTBF:	> 100,000 hours
Operating Temp:	-40° C to +74° C
Storage Temp:	-40° C to +85° C
Relative Humidity:	0% to 95% (non-condensing)†

†May be extended to condensation conditions by adding suffix '–C' to model number for conformal coating.

System Design
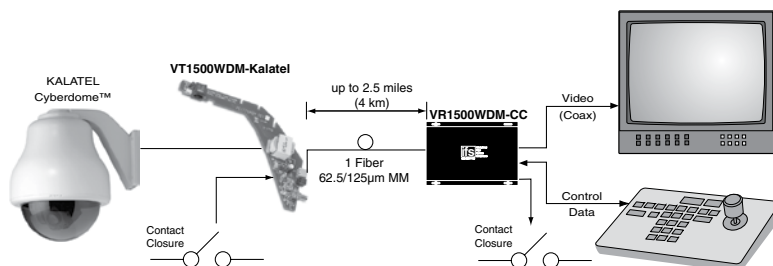
Ordering Information

	Part Number	Description	Fibers Required	Optical Pwr. Budget	Max. Distance*
Multimode 62.5/125µm**	VT1500WDM-Kalatel VR1500WDM VR1500WDM-CC	Video Transmitter/Data Receiver (850/1310 nm) Video Receiver/Data Transmitter (1310/850 nm) Video Receiver/Data Transmitter w/CC (1310/850 nm)	1	14 dB	2.5 miles (4 km)

*Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
Distance can also be limited by fiber bandwidth. ** For 50/125 Fiber, subtract 4 dB from Optical Power Budget.