

### Fiber Optic Video & Data Transmission

#### 2-Channel Video + 1 Duplex Data + 1 Ethernet/IP

2  
Video

#### System Design

Fiber Optic Video & Data Transmitter & Receiver  
VDO-20101FDET/R can transmission 2-Channel digital composite video, 1 duplex data, and 10M/100M Ethernet, Data support RS485, RS232, RS422 protocols. Ideal for Broadcast /Studio ,CCTV and Professional AV applications.

Audio

Stand-alone or rack-mount. All units of VDO-20101FDET/R come in an insert card version. The cards can be inserted into our 14-slot, 19inch 4U rack-mountable card cage (VDO-CH04).

1  
Data

Single-Mode or Multi-Mode, VDO-20101FDET/R can support FC /PC or ST/PC Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget.

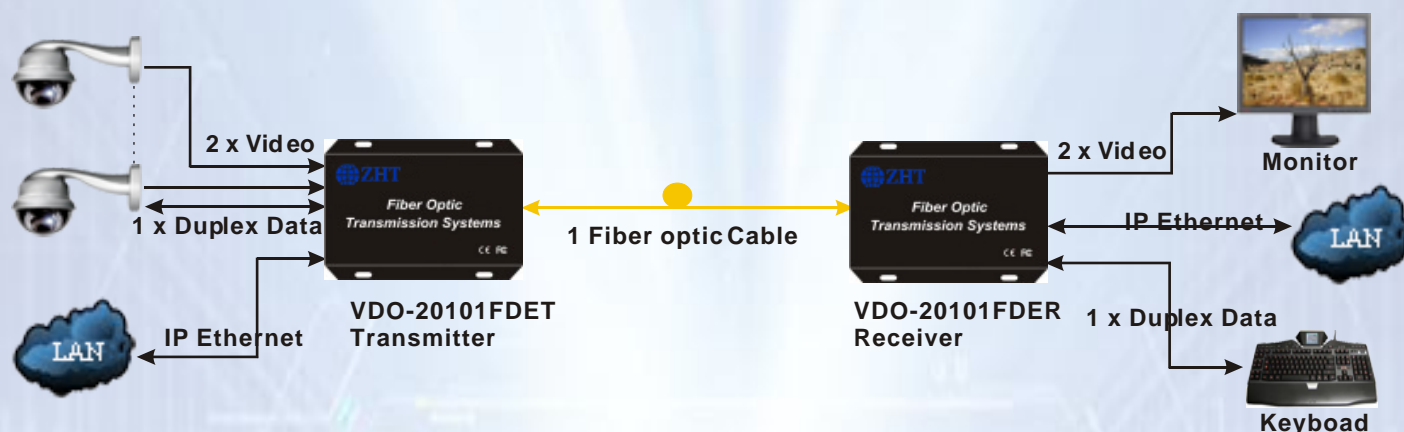
1  
Ethernet

#### Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Digital Composite Video over one fiber
- Data support RS485(2-wire or 4-wire), RS232, RS422, Contact Closure
- Compatible with all PAL, NTSC, SECAM Video Systems
- Multi-mode Fiber Support for Distances up to 2.0 km
- Single-Mode Fiber Support for Distances up to 100 km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Support Coarse Wavelength Division Multiplexing (CWDM)
- Stand alone or rack-mount
- Produce according to customer's specifications, providing OEM



#### Typical Configuration





## Video & Data over Fiber

### Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VDO-20101FDEMT	VDO-20101FDEMR	Multi-Mode	1310nm/1550nm	16dB	2.0km
VDO-20101FDEST	VDO-20101FDESR	Single-Mode	1310nm/1550nm	12dB	20km

#### Note:

- The Optical Power Budget data fit Multi-mode(62.5/125  $\mu$ m), Single-Mode(9/125  $\mu$ m).
- When using 50/125  $\mu$ m multimode fiber, subtract 3 dB from the optical power budget.
- Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
- Maximum transmission distance is also limited by fiber bandwidth.
- Power adapter is manufactured by third party and is supplied with fitted screw-terminal output cables. Power adapter included (for standalone) US, European, UK or Australian power plug.
- Please feel free to consult factory for any special requirement and customization

### Specification

• Video	• Connectors
Number of Channels: 2-Channel Video Input/output impedance: BNC 75 $\Omega$ Input/output Compatibility: PAL, NTSC, SECAM Input/output voltage: 1.0 Volt p-p Bandwidth: 6.5MHz Bit Resolution: 8-Bit Digital Transmission Differential Gain: < 1.5% Differential Phase: < 1.5° Tilt: < 5% Signal-to-Noise Ratio(SNR): > 67 dB	Video: 75 $\Omega$ BNC (Gold Center Pin) Data: Terminal Block Optical: FC (standard), ST Optional Stand-Alone Power: Screw terminal block Rack Power: AC line cord
• Data	• Electrical & Mechanical
Data Formats: RS485(2-wire or 4-wire), RS232/422, Contact Closure Data Rate: DC to 115.2Kbps Bit Error Rate: 10E-9	Input Power Requirements: DC 5V@2A Power Adapter: AC 100V~240V Power Consumption: < 3W Stand-Alone Dimensions: 142mm × 107mm × 25mm Card for 4U Rack Dimensions: 145mm × 170mm × 20mm Shipping Weight: 1.8kg (include TX & RX)
• Ethernet/IP	• Environmental
Standard: Ethernet IEEE 802.3 Data Rate: 10/100 Mbps Connector: RJ-45, Auto MDI/MDI-X	Operating Temperature: -45° C ~ +75° C Storage Temperature: -45° C ~ +85° C Relative Humidity: 0%~95% (non-condensing) MTBF: >100,000 hours

Due to continuous improvement, all products specifications are subject to change without further notice.  
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