



# Wintop Optical Technology Co.,Ltd

## WT fiber-optic video transceivers

WT fiber-optic video transceivers can simultaneously transmit 1-64 channels of 8-bit digitally encoded video / return or bidirectional data / unidirectional or bidirectional audio / Ethernet / Telephone / Dry contact over one multimode or single-mode optical fiber. These multiplexers are typically used in applications where the cameras have P/T/Z capabilities. Plug and Play design ensures the ease of installation and operation. Electronic and optical adjustments are never required. LED indicators are provided for instantly monitoring system status. Devices are available for either standalone or rack-mount installation ,which is suitable for different working environment .

### PRODUCT CHARACTERISTICS

- ◆ 8-bit digitally encoded and non-compression video transmission
- ◆ Directly compatible with NTSC, PAL, and SECAM CCTV camera systems and support RS-232, RS-422, and RS-485 data protocols
- ◆ Support any high-resolution video signal
- ◆ Automatic compatible PAL, NTSC and SECAM video system
- ◆ Power supply and other parameter state indication, which can monitor the operation condition of system
- ◆ Support no-damage regenerative trunk of video
- ◆ Constant input optical power, and large dynamic range ,no Electrical or Optical Adjustments Required .
- ◆ Special ASIC design .
- ◆ Industry-grade of operating temperature from -10℃ to 75℃ , which is applied to the different working environment
- ◆ Hot-swap function
- ◆ Stand-alone type or card-type installed in 19" 2U or 4U rack-mount chassis.



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**WT fiber-optic video transceivers Part No. WT-S1V↑1D↓3-T/RFM**

## Technical Specification

Video channels	<b>1 channel</b>	
Video bandwidth	5-7.5 MHz	
Automatic compatible video system	PAL、NTSC、SECAM	
Video input / output impedance	75 Ω	
Video signal-to-noise ratio	≥67dB	
Differential gain	( 10%-90%APL ) DG <1% ( typical value)	
Differential phase	( 10%-90%APL ) DP <0.7° ( typical value)	
Video connector	BNC	

<b>Fiber-optic Specification</b>	<p>F/O connector: FC/ST/SC</p> <p>Transmitter : Tx Power:-15 ~ -8dBm    Sensitivity :≤-35dBm</p> <p>Receiver : Tx Power:-15 ~ -8dBm    Sensitivity :≤-35dBm</p> <p>Transmission Distance :20KM (single mode)    Operating Wavelength:</p> <p>TX1310/RX1550nm ( Transmitter ) ; TX1550/RX1310nm ( Receiver )</p>
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## Specification of custom-made options

<b>Data</b>	<p><b>Connector: Terminal Blocks</b></p> <p>Encoded type : RS485 / RS422 / RS232 / Manchester</p> <p>Data rate : 0 - 400Kbps</p> <p>BER: ≤10<sup>-9</sup></p>
<b>Audio</b>	<p><b>Connector: Terminal Blocks</b></p> <p>Audio input / output impedance :600Ω(Balance/ unbalance)</p> <p>Audio input / output voltage :2Vp-p ( typical value)</p> <p>Audio input / output level :0dBm ( typical value)</p> <p>Video bandwidth:10HZ~12KHZ</p> <p>Audio digital encoded bandwidth :24bit</p> <p>Audio signal-to-noise ratio: S/N≥95dB (weighted)</p>
<b>Telephone</b>	<p><b>Connector: RJ11</b></p> <p>Bandwidth :8KHZ</p>



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	Features : Support call-showing function ;support H-F Operating mode : Point to point hotline mode / FXS-FXO
Ethernet	<b>Connector: RJ45</b> Support mode : Half duplex or Full duplex Standards : IEEE802.3 Data rate : 10M / 100Mbps Bandwidth: 25M

**Dimensions:** 11.1(L)×10.7(W)×2.8(H) cm

**Operating Voltage:** DC5V (we will offer external power supply from AC96-240V to DC5V for each unit )

**Operating Temperature:** -10℃ to +75℃

**Storing Temperature :** -55℃ to +85℃

**Humidity:** 0 to 95% non-condensing

**MTBF :** ≥ 10<sup>5</sup> hours

**Warranty :** 3 years

### Application :

- Intelligent Transportation System
- Connection of Sub-network for Surveillance Center
- Public Security Surveillance
- High Way & Toll Station Surveillance
- Industrial Closed Circuit Television Surveillance

## WT fiber-optic video transceivers Part No. WT-S4V↑1D↓3-T/RF

### Technical Specification

Video channels	<b>4 channels</b>	
Video bandwidth	5-7.5 MHz	
Automatic compatible video system	PAL、NTSC、SECAM	
Video input / output impedance	75 Ω	
Video signal-to-noise ratio	≥67dB	





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Differential gain	( 10%-90%APL ) DG <1% ( typical value)
Differential phase	( 10%-90%APL ) DP <0.7° ( typical value)
Video connector	BNC
<b>Fiber-optic Specification</b>	<p>F/O connector: FC/ST/SC</p> <p>Transmitter : Tx Power:-8 ~ -3dBm    Sensitivity :≤-35dBm</p> <p>Receiver : Tx Power:-15 ~ -8dBm    Sensitivity :≤-24dBm</p> <p>Transmission Distance :20KM (single mode)</p> <p>Operating Wavelength: TX1310/RX1550nm ( Transmitter ) ; TX1550/RX1310nm ( Receiver )</p>
<b>Specification of custom-made options</b>	
<b>Data</b>	<p><b>Connector: Terminal Blocks</b></p> <p>Encoded type : RS485 / RS422 / RS232 / Manchester</p> <p>Data rate : 0 - 400Kbps</p> <p>BER: ≤10<sup>-9</sup></p>
<b>Audio</b>	<p><b>Connector: Terminal Blocks</b></p> <p>Audio input / output impedance :600Ω(Balance/ unbalance)</p> <p>Audio input / output voltage :2Vp-p ( typical value)</p> <p>Audio input / output level :0dBm ( typical value)</p> <p>Video bandwidth:10HZ~12KHZ</p> <p>Audio digital encoded bandwidth :24bit</p> <p>Audio signal-to-noise ratio: S/N≥95dB (weighted)</p>
<b>Telephone</b>	<p><b>Connector: RJ11</b></p> <p>Bandwidth :8KHZ</p> <p>Features : Support call-showing function ;support H-F</p> <p>Operating mode : Point to point hotline mode / FXS-FXO</p>
<b>Ethernet</b>	<p><b>Connector: RJ45</b></p> <p>Support mode : Half duplex or Full duplex</p> <p>Standards : IEEE802.3</p> <p>Data rate : 10M / 100Mbps</p> <p>Bandwidth: 25M</p>



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**Dimensions** :19.2(L)×17.3(W)×2.8(H) cm

**Operating Voltage:** DC5V (we will offer external power supply from AC96-240V to DC5V for each unit )

**Operating Temperature:** -10℃ to +75℃

**Storing Temperature** : -55℃ to +85℃

**Humidity:** 0 to 95% non-condensing

**MTBF** : ≥ 10<sup>5</sup> hours

**Warranty** : 3 years

## Application :

- Intelligent Transportation System
- Connection of Sub-network for Surveillance Center
- Public Security Surveillance
- High Way & Toll Station Surveillance
- Industrial Closed Circuit Television Surveillance

<b>WT fiber-optic video transceivers Part No. WT-S8V↑1D↓3-T/RF</b>	
<b>Technical Specification</b>	
Video channels	<b>8 channels</b>
Video bandwidth	5-7.5 MHz
Automatic compatible video system	PAL、NTSC、SECAM
Video input / output impedance	75 Ω
Video signal-to-noise ratio	≥67dB
Differential gain	( 10%-90%APL ) DG <1% ( typical value)
Differential phase	( 10%-90%APL ) DP <0.7° ( typical value)
Video connector	BNC
<b>Fiber-optic Specification</b>	F/O connector: FC/ST/SC Transmitter : Tx Power:-8 ~ -3dBm    Sensitivity :≤-35dBm





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	Receiver : Tx Power:-15 ~ -8dBm    Sensitivity :≤-24dBm Transmission Distance :20KM (single mode) Operating Wavelength: TX1310/RX1550nm ( Transmitter ) ; TX1550/RX1310nm  ( Receiver )
<b>Specification of custom-made options</b>	
Data	<b>Connector: Terminal Blocks</b> Encoded type : RS485 / RS422 / RS232 / Manchester Data rate : 0 - 400Kbps BER: ≤10 <sup>-9</sup>
Audio	<b>Connector: Terminal Blocks</b> Audio input / output impedance :600Ω(Balance/ unbalance) Audio input / output voltage :2Vp-p ( typical value) Audio input / output level :0dBm ( typical value) Video bandwidth:10HZ~12KHZ Audio digital encoded bandwidth :24bit Audio signal-to-noise ratio: S/N≥95dB (weighted)
Telephone	<b>Connector: RJ11</b> Bandwidth :8KHZ  Features : Support call-showing function ;support H-F  Operating mode : Point to point hotline mode / FXS-FXO
Ethernet	<b>Connector: RJ45</b> Support mode : Half duplex or Full duplex  Standards : IEEE802.3  Data rate : 10M / 100Mbps Bandwidth: 25M

**Dimensions** :19.2(L)×17.3(W)×5.6(H) cm

**Operating Voltage**: DC5V (we will offer external power supply from AC96-240V to DC5V for each unit )

**Operating Temperature**: -10□ to +75□

**Storing Temperature** : -55□ to +85□

**Humidity**: 0 to 95% non-condensing

**MTBF** : ≥ 10<sup>5</sup> hours

**Warranty** : 3 years

**Application** :



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Intelligent Transportation System

Connection of Sub-network for Surveillance Center


Public Security Surveillance

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## WT fiber-optic video transceivers Part No. WT-S16V↑1D↓3-T/RL

### Technical Specification

Video channels	<b>16 channels</b>	
Video bandwidth	5-7.5 MHz	
Automatic compatible video system	PAL、NTSC、SECAM	
Video input / output impedance	75 Ω	
Video signal-to-noise ratio	≥67dB	
Differential gain	( 10%-90%APL ) DG <1% ( typical value)	
Differential phase	( 10%-90%APL ) DP <0.7° ( typical value)	
Video connector	BNC	
<b>Fiber-optic Specification</b>	F/O connector: LC (SFP) Transmitter: Tx Power:-8~-3dBm Sensitivity:≤-22dBm Receiver : Tx Power:-8~-3dBm Sensitivity:≤-22dBm Transmission Distance :20KM (single mode) Operating Wavelength: TX1310/RX1550nm ( Transmitter ) ; TX1550/RX1310nm ( Receiver )	
<b>Specification of custom-made options</b>		
<b>Data</b>	<b>Connector: Terminal Blocks</b> Encoded type : RS485 / RS422 / RS232 / Manchester	



# Wintop Optical Technology Co.,Ltd

	Data rate : 0 - 400Kbps BER: $\leq 10^{-9}$
Audio	<b>Connector: Terminal Blocks</b> Audio input / output impedance :600Ω(Balance/ unbalance) Audio input / output voltage :2Vp-p ( typical value) Audio input / output level :0dBm ( typical value) Video bandwidth:10HZ~12KHZ Audio digital encoded bandwidth :24bit Audio signal-to-noise ratio: S/N $\geq$ 95dB (weighted)
Telephone	<b>Connector: RJ11</b> Bandwidth :8KHZ  Features : Support call-showing function ;support H-F  Operating mode : Point to point hotline mode / FXS-FXO
Ethernet	<b>Connector: RJ45</b> Support mode : Half duplex or Full duplex  Standards : IEEE802.3  Data rate : 10M / 100Mbps Bandwidth: 25M

**Dimensions** :48.3(L) $\times$ 22(W) $\times$ 4.4(H) cm ( 19" 1U )

**Operating Voltage**: DC5V (we will offer external power supply from AC96-240V to DC5V for each unit )

**Operating Temperature**: -10 $\square$  to +75 $\square$

**Storing Temperature** : -55 $\square$  to +85 $\square$

**Humidity**: 0 to 95% non-condensing

**MTBF** :  $\geq 10^5$  hours

**Warranty** : 3 years

## Application :

Intelligent Transportation System

Connection of Sub-network for Surveillance Center

Public Security Surveillance

High Way & Toll Station Surveillance

Industrial Closed Circuit Television Surveillance