

OPT-S1V1D-T/RF

1 Channel Video+Data

- 8/10-bit digital code and non-compression type video transmission
- Support any high-resolution video signal
- 5Hz-10MHz video channel
- Automatic compatible PAL, NTSC and SECAM video system

OPT series video optical transceiver adopts the advanced digital video and optical fiber transmission technology, and implement the real-time transmission & synchronization, no-distortion and high quality 1-channel video signal on the single fiber. 1-channel video optical transceiver adopts the full digital video non-compression transmission technology and high quality video effect, which can meet the user's requirements; the play-and-plug design makes the installation more convenient and easier, and it is unnecessary to implement the spot adjustment; its optical module and core circuit adopts the imported components that have high stability, and all optical & electrical interfaces conform to the international standards, which is applied to the different working environment. This optical transceiver with video status indication can monitor the normal operation of system.

This optical transceiver adopts the structure modularization design, and the user can flexibly select or customize the configuration according to the spot detailed conditions; the above optical transceiver can adopt the installation mode of independent type or framework type.

Features

Product Characteristics

- Card type or independent structure, which is applied to centralized management 2.5U chassis
- 8/10-bit digital code and non-compression type video transmission
- Support any high-resolution video signal
- 5Hz-10MHz video channel
- Automatic compatible PAL, NTSC and SECAM video system
- With APC circuit, constant input optical power, and large dynamic range
- Kilomega optical fiber transmission, large capacity, and easy to upgrade
- Power supply and other parameter state indication, which can monitor the operation condition of system
- Support no-damage regenerative trunk of video
- Advanced self-adapting technology, and it is unnecessary to implement the adjustment of spot electrics or optics when using
- Industry-grade design and modularization design make the equipment reliable and flexible
- Can automatically restore the fuse of power supply
- Full built-in power supply, and the appearance design of shell is unique.
- External dimensions (94mmX70mmX26mm)
- Internal power dissipation of power supply: 2.6W (Input: AC 140~260V)

Applications

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

Video Feature :

Video Interface: BNC

Video input/output impedance: 75Ω (unbalanced)

Video input/output Voltage: 1VP - P (peak value), Max 1.2Vpp

Video Bandwidth: 10MHz

Video sampling: 15MHz high speed sampling

Video digit bit width: 10/12 bit

Differential gain: (10%-90%APL) DG <1%(Typical value)

Differential phase: (10%-90%APL) DP <0.8°(Typical value)

Video SNR: S/N ≥ 70dB (Maximum optical link path loss)

Audio Features :

Audio interface: Forward Direction, Reverse Direction or Bi-directional Audio

Interface terminal: standard industrial connecting terminals

Audio input/output electric level typical: 0dBm

Audio input/output impedance: 600Ω (balanced/unbalanced)

Audio input/output amplitude: 2VP-P(peak value)

Audio bandwidth: 20Hz~20kHz

Sample rate: 58.6K
 Nonlinear distortion coefficient: $\leq 1\%$
 Audio SNR: $S/N \geq 85\text{db}$

Data Features :

Interface : standard industrial connecting terminals

Controlling Equipments : PTZ decoder, Keyboard ,data interface of Matrix, High speed dome camera, industrial equipments

Interface Signals: RS-485(2 lines),RS232,RS422 and so on

RS232

RS-232 data speed rate DC-115.2Kbps

RS-232 error of bit rate $\leq 10E-12$

RS-232 data agreement fully supporting all kinds of RS-232 agreement

RS-232 Network Connecting way Bi-directional RS-232,supporting point to point

RS485/RS422

RS-485/RS422 data speed rate DC-250Kbps

RS-485/RS422 error of bit rate $\leq 10E-12$

RS-485/RS422 Max node number: 128

RS-485/RS422Max distances: 1200meter

RS-485/RS422 data agreement fully supporting all kinds of RS-485/RS-422 agreement, including the Modbus agreements

RS-485/RS422 Network Connecting way Supporting forward, reverse and bi-directional RS-485/RS422, support point to point, support point to more points

Alarm Features:

Interface : standard industrial connecting terminals (Alarm, Switch, Remote control)

Alarm/switch input signals: any active or passive alarm/switch input, supporting passive switch

Alarm/switch output signals: any active or passive alarm/switch output, supporting relay contact output

Current: Low current, High-current and high-voltage can use above 1A/12V

Ethernet Features:

Interface Speed Rate: 10/100Mbit/s Auto-adaptation, the default is 100MBPS working condition

Interface Type: RJ-45

Supporting Agreements: IEEE802.3U 100Base-TX, 10/100M

Communication Working format: Full-duplex or half-duplex

General Parameter:

Operating Temperature: $-40\text{ }^{\circ}\text{C} \sim +85\text{ }^{\circ}\text{C}$

Storage Temperature: $-45\text{ }^{\circ}\text{C} \sim +95\text{ }^{\circ}\text{C}$

Relative humidity: 0 ~95% (Non-condensing)

Power Voltage: AC85-260v/50Hz

MTBF : ≥ 105 hours

Power supplier : 3.5 w (Input:DC5V 3000mA)

Fiber Features:(the fiber optic connectors usually is FC, can order ST)

Type	wavelength (nm)	TX power dBm	Transmission Distance Km	Lose dBm/Km	Fiber Type
Multi-mode	850、1310	-19.5~-16	0~0.5	1	850/1310nm(Multi-mode)
Single-mode	1310	-8~-5	0~20	0.5	Single-mode(9/125um)
	1310	-5~-3	0~40	0.5	Single-mode (9/125um)
	1550 DFB	-5~-2	0~60	0.25	Single-mode (9/125um)
	1550DFB	0~+2	0~100	0.25	Single-mode (9/125um)

