

## Type: SAE-1V1bD-T/R

### Technical Specification of SAE-1V1bD-T/R

1Channel analog Video, 1 bidirectional data on fiber optic core



- Modular industrial design ensuring reliability and flexibility
- FC and SC interface as fiber optic connector for your choice
- Stand alone and Rack mount (2U/4U Card type) for your choic
- LED indication of working status for monitoring real time operation
- Compatible with NTSC, PAL, and SECAM video signals
- Sampling rate up to 20MSPS and uncompressed video transmission (NRZ method)
- supporting any kind of analog video signal

This **SAE-1V1bD-T/R** is One channel bidirectional Data one Channel Analog Video of our products, use advanced analog and digital technologies for pursuing high performance data transmission over fiber optic. The transceiver; optionally, can send signals more than 100 kilometers on fiber. The **SAE-1V1bD-T/R** comes standard with one fiber port .



The equipment also adopt non-compressed analog (video composite) signal in PAL or NTSC mode. The product is widely used in the field of CCTV, video surveillance, and national defense, video surveillance, and national defense. This Optical Transceiver is easily monitored by virtue of LED indicators of working status and without any electrical or optical regulation on site. This product is released in standalone and rack-mount(2U/4U) packages then please consider when you place an order.

**SAE-1V1bD-T/R** is made with high quality of rigorous screened components, which have superior performance in stability, environmental adaptability. It can work normally in very cold environment to hot from -40°C to +85°C. The product is planned in a way to have better resistance against corrosion and electromagnetic interference and work for years without any degradation in expected quality. Power input also made a suitable and reliable types of power, to get more powerful suitability to environment.

#### : Applications

- CCTV and Security protection system
- Tele-Communication System
- Intelligent transportation supervisory system (ITS)
- E-learning& Campus monitoring
- Skyscraper Security Protection system
- Military Tele-Com project

#### Technical specification



### Environmental Aspects:

Working Temperature	Storage Temperature	Relative humidity	Input Voltage	Transfer Mode	Dimensions:
-40 °C~+85 °C	-40°~+75 °C	0~90% Non-condensing	DC-5V	Single mode/ Multi mode	110x116x25mm

### Link Budget:

#### 1-multi mode transmitters

Fiber type	lose	Maximum Transmission Distance	Link Power	Wavelength
62.5 um	1(dB m/km)	500(meter)	-19.5~-16(dbm)	850, 1310(nm)

#### 2-single mode transmitters

Fiber type	Lose	Maximum Transmission Distance	Link Power	Wavelength
9/125 um	0.5(dBm/km)	20(km)	-8~-5(dBm)	1310, 1550(nm)
9/125 um	0.5(dBm/km)	40(km)	-5~-3(dBm)	1310, 1550(nm)
9/125 um	0.25(dBm/km)	60(km)	-3~-1(dBm)	1310, 1550(nm)
9/125 um	0.25(dBm/km)	100(km)	0~+3(dBm)	1310, 1550(nm)



**Technical Specification**

**Data Characteristics**

Direction	Controlling Equipment	Interface supporting terminal	Type of data:
Bi-directional	PTZ decoder, Keyboard, data interface of Matrix, High speed dome camera, industrial equipment	Standard industrial connector	RS485 (2 lines), RS232, RS422 and so on

**RS485/RS422 Aspects (Optional)**

Rate of RS485/RS422	Bit rate error	Max-number of nodes	Max transmission distance	Data Agreement	Direction	Type of data:
0-255 Kbps	Less than 10E-12	128	1200meter	supporting all kinds of RS485/422	Reverse	Support point to point, support point to more point

**Video Analog Characteristics**

Interface	Input/output Impedance	Input/output Voltage	Bandwidth	Sampling	Differential gain	Differential phase	SNR
BNC	75Ω(unbalanced)	Peak value=1V Max value=1.2V	10MHz	Rate=20MHz	(10%-90%APL) DG<1%(typical value)	(10%-90%APL) DG<0.8°(typical value)	S/N<70dB



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