Smart Architecture of Espadana

Designing, Production Customization and Consultant Service

in Network and Fiber Optic System

Technical Specification

SAE- 2V5bD- 2P_R

2 port video Composite Transmitter with 2 port Receiver

Product Description

- Compatible with NTSC, PAL, and SECAM video signals
- 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 choice
- Sampling rate up to 20MSPS and uncompressed video transmission (NRZ method)
- supporting any kind of analog video signal
- LED indication of working status for monitoring real time operation

Full Descerіption

This **SAE-2V5bD-2P_R** is 2 Channel Analog Video ,5 channel bidirectional data and 2 channel phone port receiver 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 20 kilometers on fiber.
This equipment is fully transparent from front-end video device perspective. can be any kind of fiber cables. 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. 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-2V5bD-2P_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.

Application

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

Technical Specification

Environmental Aspects:

Working Temperature	Storage Temperature	Relative humidity	Input Voltage	Transfer Mode	Dimensions:
-40°C to 85°C	-40°C to 95°C	0～90% Non-condensing	DC-5V	Single mode/ Multi mode	210×206×23mm

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)

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<0.8^0(typical value)	S/N<70dB

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

Audio Interface (Optional)

Audio I/O Impedance	Audio I/O Electric Level	Frequency Response	Digital Bit Width	SNR
600Ω or other various impedances	Typical 0dBm	20KHZ Audio Digital Bit Width: 24bit SNR: >75dB	24bit SNR: >75dB	>75dB

FXS phone specification

Voltage of Ring	Frequency of Ring	Total amount of resistance	Return loss	Interface
75V	25Hz	600 Ohm (pick up)	40 dB	RJ11

FXO phone specification

Voltage of Ring	Frequency of Ring	Total amount of resistance	Return loss	Interface
35V	17Hz-60Hz	600 Ohm (pick up)	40dB	RJ11

Product Application Display