



## Optical Video Converter

**TYPE: Sepitam-1V1TTL-T/R**

**One Channel Video and One TTL Channel over Fiber Optic**



### Description:

The One Channel Analog Video and One TTL channel of our products, use advanced analog and digital technologies for pursuing high performance TTL data transmission over fiber optic. The converter can send signals more than 100 kilometers on fiber.

This link work properly in critical (very high and too low) temperature environments and work for years without any degradation in expected quality.

This equipment is fully transparent from front-end video device perspective. Just one fiber core is used to transmit all mentioned signals which can be any kind of fiber cables. The equipment also adopt non-compressed analog (video composite) signal in PAL or NTSC mode.

This Optical Transceiver is easily monitored by virtue of LED indication of working status and with out any electrical or optical regulation on site.

This product is released in standalone and rack-mount(2U/4U) packages.

### Features:

- FC and ST 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
- Compatible with NTSC, PAL, and SECAM video signals
- LED indication of working status for monitoring real-time operation
- Modular industrial design ensuring reliability and flexibility



## Specifications:

### Environmental Aspects:

Working Temperature: -20 °C~+70 °C

Storage Temperature: -25 °C~+75 °C

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

Input Voltage: AC85-260v/50Hz

MTBF: More than 100000 hours

Internal power consumption: Less than 2A on +5 Volt

### Link Budget:

#### 1- Multi mode transmitters:

Fiber Type	Loss	Maximum Transmission Distance	Link Power	Wavelength
62.5 um	1 (dBm/Km)	500 (meter)	-19.5~ -16(dBm)	850, 1310 (nm)

#### 2- Single mode transmitters:

Fiber Type	Loss	Maximum Transmis- sion Distance	Link Power	Wavelength
9/125um	0.5 (dBm/Km)	20(Kilo meter)	-8~ -5 (dBm)	1310,1550 (nm)
9/125um	0.5 (dBm/Km)	40(Kilo meter)	-5~ -3 (dBm)	1310,1550 (nm)
9/125um	0.25 (dBm/Km)	60(Kilo meter)	-3~ -1 (dBm)	1310,1550 (nm)
9/125um	0.25 (dBm/Km)	100(Kilo meter)	0~ +3 (dBm)	1310,1550 (nm)



### Video Characteristics:

Inter- face	Input/ Output Impedance	Input/ Output Voltage	Band- width	Sampling	Differential gain	Differential phase	SNR
BNC	75Ω (unbalanced)	Peak value = 1V Max value = 1.2V	10MHZ	Up to 20MHz high speed sampling	(10%-90% APL) DG < 1% (Typical value)	(10%-90% APL ) DP <0.8° (Typical value)	S/N ≥ 70dB

### TTL Characteristics:

Interface	Standard	Voltage level	Distance
Phoenix terminal	TTL, LVTTTL, COMS	3.3 V	15 m

### Applications:

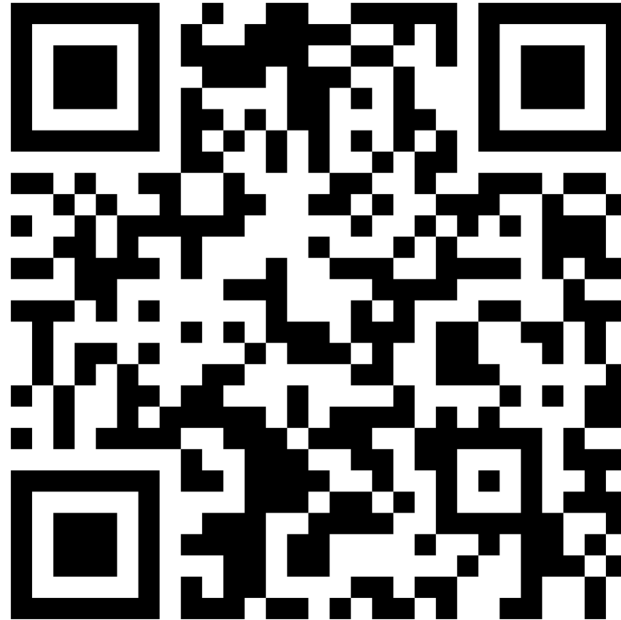
- CCTV and Security protection system
- Tele-Communication System
- Intelligent transportation supervisory system (ITS)
- Telemedicine
- E-learning& Campus monitoring
- Skyscraper Security Protection system
- Military Tele-Com projects



# Technical Specification of

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