

RC-SDV1TR Series

1-CHANNEL HD-SDI VIDEO TRANSCEIVER



OVERVIEW

RC-SDV1T/R Series video transmitter and receiver support highest-quality transmission of 1-channel uncompressed 1.485 Gbps SDI/HD-SDI video signal over one core single mode or multimode fiber. Fully compliant with SMPTE424M, SMPTE292M, SMPTE259M and ITU digital video standards, the RC-SDV1T/R series ensures the highest performance for most demanding broadcast applications. The hot-pluggable and adjustment-free design ensures the convenience of the installation and operation. The modules are available in either standalone or rack mount versions.

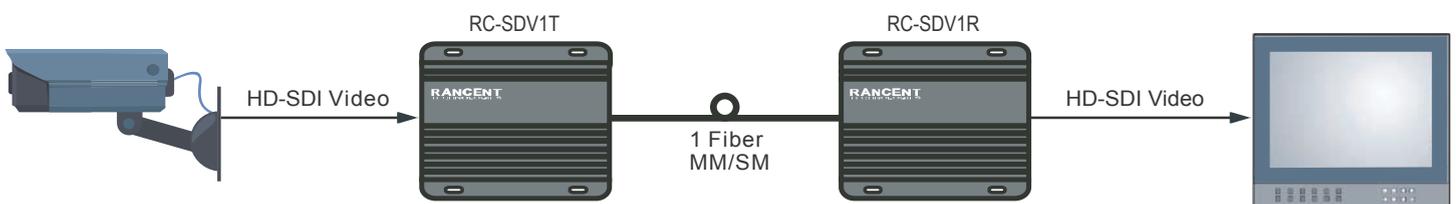
FEATURES

- HD/SD-SDI high definition digital code
- Non-compressed HD-SDI or SD-SDI signal transmission
- Support data rate up to 1.485Gbps
- Support resolution 720p50/60, 1080i50/60, 1080p25/30
- Support all SMPTE 259M standard in 270Mbps - 360Mbps
- Support SMPTE424M, SMPTE292M, SMPTE259M and ITU-R BT.601, ITU-R BT.1120 standards
- LED indicators for monitoring of system operating status
- Redundant output for preview on local monitor
- Standalone or Rack Mount Version

APPLICATIONS

- Digital broadcast application such as studio signal routing and temporary OB or studio links
- Remote broadcast camera links
- Campus digital video distribution
- Very high performance surveillance networks

SYSTEM DESIGN



RC-SDV1TR Series

1-Channel HD-SDI Video Transceiver

SPECIFICATIONS

Video

Signal Type	SDI, HD-SDI
Video Resolution	8 Bit/10Bit Auto
Data Rate	270Mbps~1.485Gbps
TV Signal Standard	SMPTE424M, SMPTE292M, SMPTE259M, DVB-ASI, Other Telecom Signals, ITU-R BT.601, ITU-R BT.1120

Video Input

Video Input	BNC (75 ohms)
Video Input Channels	2 (1 for TX / 1 for Local Preview)
Data Rate	19Mbps~1.485Gbps
Nominal Level	0.8 Vp-p
Min/Max level	0.5 V to 1.0 Vp-p
Return loss	≥15 dB @ 5 MHz to 1.5 GHz
Input cable equalization	Up to -30 dB of cable loss

Connector

Optical	LC (SFP)
Video	BNC

Video Output

Video Output	BNC (75 ohms)
Video Output Channels	1
Re-clock	270 Mbps, 1.485 Gbps
Nominal Level	0.8 Vp-p
Min/Max level	0.5 V to 1.0 Vp-p
Return loss	<-25 dB @ 100 MHz

Optical

Wavelength	1310nm
Optical Emitter	Laser Diode
Optical Fiber	9/125u single mode
Number of Fibers	1
Return Loss	>15dB
Shake	<0.2UI

General

Power Supply	DC5V 2A
Size	152 ×130 ×28.8mm
Construction:	Aluminum
Finish:	Paint
MTBF:	> 100,000 hours
Operating Temp:	-35° C to +65°C
Storage Temp:	-45° C to +85°C

ORDERING INFORMATION

Part Number	Description	Fiber	Optical PWR Budget	Max Distance
RC-SDV1TS	1-Channel HD-SDI TX	Singlemode	20dB	30KM
RC-SDV1RS	1-Channel HD-SDI RX	Singlemode	20dB	30KM
RC-SDV1TM	1-Channel HD-SDI TX	Multimode	6dB	500M
RC-SDV1RM	1-Channel HD-SDI RX	Multimode	6dB	500M

*Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.