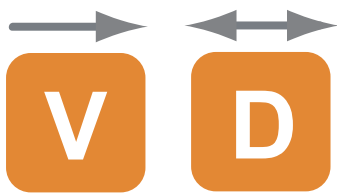


# RC-V1BD1TR-HD Series

1-CHANNEL DIGITALLY ENCODED  
HD-CVI/TVI/AHD VIDEO WITH 1-CHANNEL  
BI-DIRECTIONAL DATA TRANSCEIVER



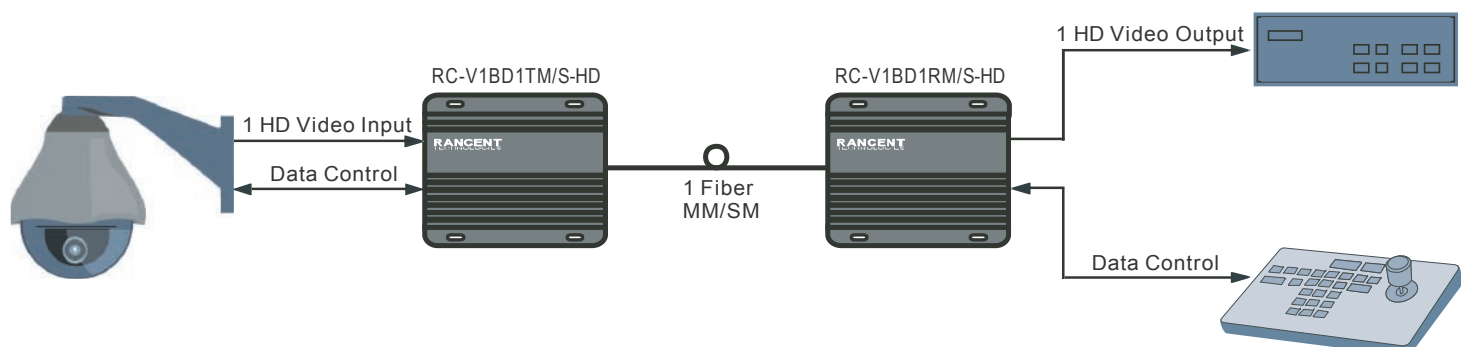
## OVERVIEW

RC-V1BD1T/R-HD Series video transmitter and receiver support highest quality of 10-bit digitally encoded HD-CVI, AHD or HD-TVI video and bi-directional data transmission over one core single mode or multimode fiber. Optimized optical modules which are compatible with 25/30/50/60F @720P and 25/30F@1080P ensure the highest performance for most demanding 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.

## APPLICATIONS

- Analog HD CCTV (PTZ Video)
- Intelligent transportation systems (ITS)
- Security and surveillance
- Access Control

## SYSTEM DESIGN



## FEATURES

- 10-Bit Digitally Encoded Uncompressed Transmission
- Compatible with NTSC, PAL or SECAM Video Standards
- Simultaneous Transmission of Video and Data
- Simplex or Full-duplex RS485 or RS422 Operation
- High Performance Laser-based Optics
- Plug-and-play Design with No Adjustment Required
- Local LED Indicators to Monitor System Status
- Wide Optical Dynamic Range
- No EMI, RFI, Cross Talk and Video Distortion
- Support up to 30KM
- No Video Degradation and Optical Attenuation
- Multimode or Singlemode Fiber
- Standalone or Rack Mount Options

# RC-V1BD1TR-HD Series

1-Channel Digital Encoded HD-CVI/TVI/AHD Video  
with 1-Channel Bi-Data Transceiver

## SPECIFICATIONS

### Video

Video Input	1 volt pk-pk (75 ohms)
Video Voltage Range	0.6~2.0Vp-p
Video Input/Output Channels	1
Bandwidth	60 MHz
Bit Resolution	10-bit
Differential Gain	1%
Differential Phase	<1°
Tilt	< 1%
Up/down time	<0.8ns
Max. Shake	<0.2 UI
Reflection Loss	>15dB
S/N Ratio	> 60dB (Weighted))

### Data

Data Protocol	RS485/RS422/RS232
Data Rate	0~300kps
Data Channels	1 (Bi-directional)
Error Rate	10

### Indicating LEDs

Power Present  
Video Present

### Optical

Wavelength	850/1310nm, MM 1310/1550nm, SM
Optical Emitter	Laser Diode
Number of Fibers	1

### Connectors

Optical	ST or SC
Video	BNC

### General

Power Supply	DC5V 2A
Size	110 x 104 x 28mm
Construction:	Aluminum
Finish:	Paint
MTBF:	> 100,000 hours
Operating Temp	-35° C to + 65°C
Storage Temp	-40° C to +85°C

## ORDERING INFORMATION

Part Number	Description	Fiber	Optical PWR Budget	Max Distance
RC-V1BD1TS-HD	1 HD Video/1 Bi Data Transmitter	SM	20dB	30KM
RC-V1BD1RS-HD	1 HD Video/1 Bi Data Receiver	SM	20dB	30KM
RC-V1BD1TM-HD	1 HD Video/1 Bi Data Transmitter	MM	14dB	3KM
RC-V1BD1RM-HD	1 HD Video/1 Bi Data Receiver	MM	14dB	3KM

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