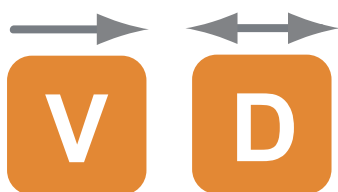


# RC-V1BD1HDTR-C Series

1-CHANNEL DIGITALLY ENCODED  
HD-CVI/TVI/AHD VIDEO WITH 1-CHANNEL  
BI-DIRECTIONAL DATA TRANSMITTER AND  
RECEIVER MODULE



## OVERVIEW

RC-V1BD1HDTR-C Series video transmitter and receiver card module incorporates an all-digital encoding technology that transmits 10-bit digitally encoded HD-CVI/TVI/AHD video and bi-directional data over one core singlemode or multimode fiber. The model is available as rack mountable cards that can be installed in Rancent's RC-300C 19" rack mount chassis. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations for different transmission applications. The hot-pluggable and adjustment-free design ensures the convenience of the installation and operation.

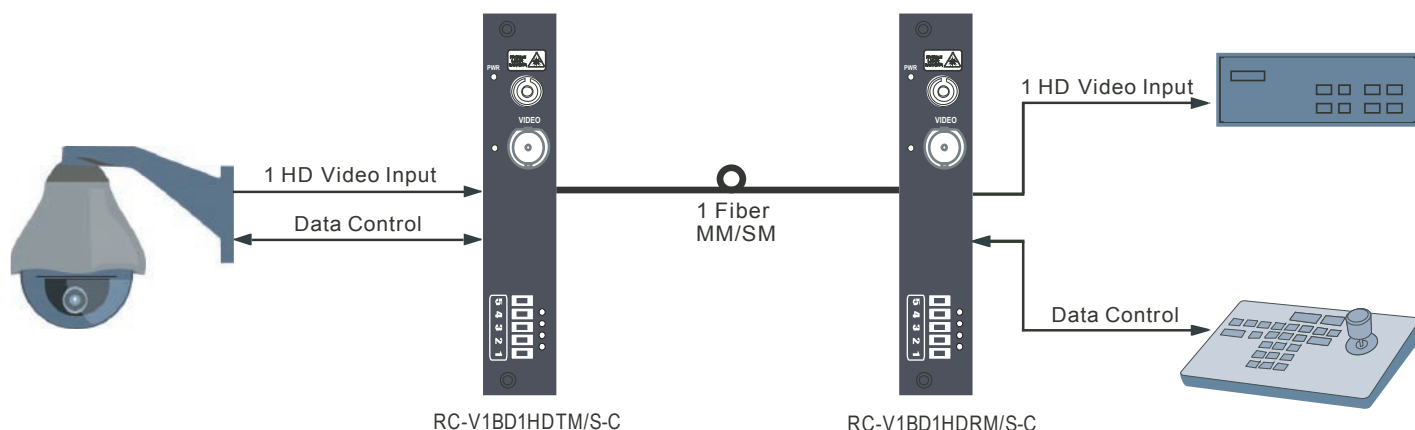
## APPLICATIONS

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

## 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

## SYSTEM DESIGN



# RC-V1BD1HDTR-C Series

1-Channel Digital Encoded HD-CVI/TVI/AHD Video  
with 1-Channel Bi-Data Transmitter and Receiver Module

## 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	170 x 129 x 20.5mm
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-V1BD1HDTS-C	1 HD Video/1 Bi Data Transmitter Module	SM	20dB	30KM
RC-V1BD1HDRS-C	1 HD Video/1 Bi Data Receiver Module	SM	20dB	30KM
RC-V1BD1HDTM-C	1 HD Video/1 Bi Data Transmitter Module	MM	14dB	3KM
RC-V1BD1HDRM-C	1 HD Video/1 Bi Data Receiver Module	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.