

# RC-V1BD1A1C1ETR Series

1-CHANNEL DIGITALLY ENCODED VIDEO/  
1-CHANNEL BI-DIRECTIONAL DATA/  
1-CHANNEL BI-DIRECTIONAL AUDIO/  
1-CHANNEL BI-DIRECTIONAL CONTACT CLOSURE/  
1-CHANNEL 10/100M ETHERNET TRANSCEIVER



## OVERVIEW

RC-V1BD1A1C1ET/R Series transmitter and receiver transmit 1-channel 8-bit digitally encoded video, 1-channel bi-directional data, 1-channel bi-directional audio, 1-channel bi-directional contact closure and 1-channel 10/100M Ethernet over one core single mode or multimode fiber. Optimized optical modules ensure the highest performance for most demanding CCTV 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.

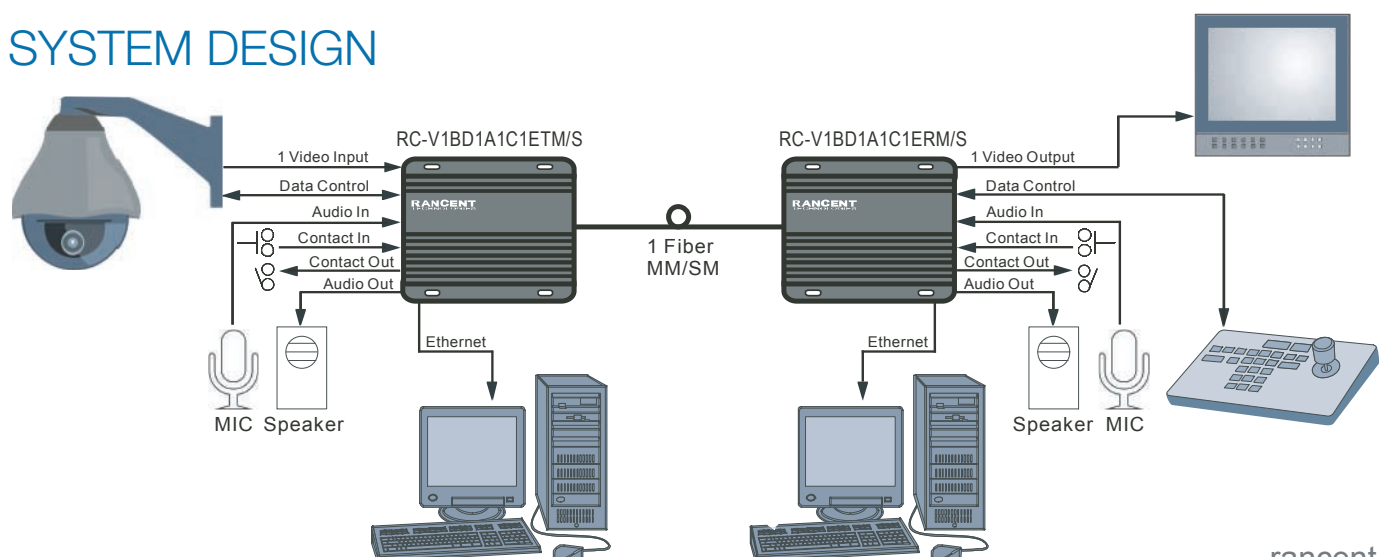
## APPLICATIONS

- CCTV(Fixed Video)
- Intelligent transportation systems (ITS)
- Security and surveillance
- Access Control

## FEATURES

- 8-Bit Digitally Encoded Uncompressed Transmission
- 24-Bit Digitally Encoded Audio Transmission
- Compatible with NTSC, PAL or SECAM Video Standards
- Simultaneous Transmission of Video, Data, Audio Contact Closure and Ethernet
- 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-V1BD1A1C1ETR Series

1-Channel Digital Encoded Video/1-Channel Bi-directional Data /  
1-Channel Bi-directional Audio/1-Channel Bi-directional Contact  
Closure/1-Channel 10/100M Ethernet Transceiver

## SPECIFICATIONS

### Video

Video Input	1 volt pk-pk (75 ohms)
Video Voltage Range	0.6~2.0Vp-p
Bandwidth	5 Hz to 8 MHz
Bit Resolution	8-bit
Differential Gain	1%
Differential Phase	<1°
Tilt	< 1%
S/N Ratio	> 60dB (Weighted)

### Data

Data Protocol	RS485/RS422/RS232
Data Rate	0~300kps
Error Rate	10

### Audio

Audio Impedance	600 Ohms
Max Input/Output Voltage	2.0Vp-p
Frequency Response	10Hz ~ 20KHz
Bit Resolution	24-bit
S/N Ratio	> 95dB (Weighted)

### Contact Closure

Relay	24VDC/0.5A (NO) 125VAC/0.1A(NO)
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### Ethernet

Data Rate	10/100Mbps
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### Indicating LE Ds

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
Data/Audio/Contact	Terminal Screws
Ethernet	Shielded RJ45

### 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	-40° C to +85°C

## ORDERING INFORMATION

Part Number	Description	Fiber	Optical PWR Budget	Max Distance
RC-V1BD1A1C1ETS	1 Video/1 Bi Data/1 Bi Audio/1 Bi Contact/1 Ethernet TX	SM	20dB	30KM
RC-V1BD1A1C1ERS	1 Video/1 Bi Data/1 Bi Audio/1 Bi Contact/1 Ethernet RX	SM	20dB	30KM
RC-V1BD1A1C1ETM	1 Video/1 Bi Data/1 Bi Audio/1 Bi Contact/1 Ethernet TX	MM	14dB	3KM
RC-V1BD1A1C1ERM	1 Video/1 Bi Data/1 Bi Audio/1 Bi Contact/1 Ethernet RX	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.