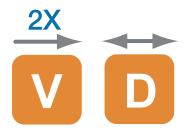
## RANCENT

## RC-V2BD1TR-HD Series

2-CHANNEL DIGITALLY ENCODED

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





#### **OVERVIEW**

RC-V2BD1T/R-HD Series video and data transmitter and receiver transmit two channels of 10-bit digitally encoded HD-CVI, AHD or HD-TVI video and bi-directional 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.

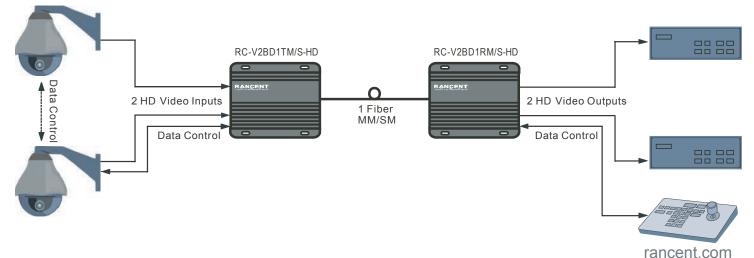
## **APPLICATIONS**

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

### **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-V2BD1TR-HD Series

2-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	2
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	152 ×130 ×28.8mm
Construction:	Aluminum
Finish:	Paint

MTBF: > 100,000 hoursOperating Temp  $-35^{\circ} \text{ C to} + 65^{\circ} \text{C}$ Storage Temp  $-40^{\circ} \text{ C to} + 85^{\circ} \text{C}$ 

## ORDING INFORMATION

Part Number	Description	Fiber	Optical PWR Budget	
RC-V2BD1TS-HD	2 HD Video/1 Bi Data Transmitter	SM	20dB	30KM
RC-V2BD1RS-HD	2 HD Video/1 Bi Data Receiver	SM	20dB	30KM
RC-V2BD1TM-HD	2 HD Video/1 Bi Data Transmitter	MM	14dB	3KM
RC-V2BD1RM-HD	2 HD Video/1 Bi Data Receiver	MM	14dB	3KM

<sup>\*</sup>Optical transmission distance is limited to optical loss of the fiber and any additional lossintroduced by connectors, splices and patch panels.

