#### RANCENT TECHNOLOGIES

## RC-V1BD1A1TR-DVI Series

- 1-CHANNEL NON-COMPRESSED DVI /
- 1-CHANNEL BI-DIRECTIONAL DATA /
- 1-CHANNEL FORWARD AUDIO TRANSCEIVER







#### **OVERVIEW**

RC-V1BD1A1TR-DVI Series DVI transmitter & receiver is designed to send one channel of 1.2/1.3 compliant DVI video, one channel of bi-directional RS232 or reverse RS485, one channel of forward audio, one PC port and two USB ports for keyboard & mouse control over one core single mode or multimode fiber. Fully compliant with all the video resolutions up to 1080p,60Hz, these models ensure the highest performance for most demanding digital video and 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.

## **APPLICATIONS**

- Digital broadcast television systems
- Digital video distribution systems
- Extremely high quality video conferencing
- Concert & sporting event video displays



## **FEATURES**

- Extend DVI video up to 1080p, 60Hz
- Graphic resolutions up to 1920x1080 over one fiber
- Uses all-digital processing & transmission for crystal-clear signals and no color skewing
- DVI 1.2/1.3 and HDCP V1.2 Standard Compliant
- No settings or adjustments necessary
- Simutaneous transmission of Bi-Data and Forward Audio
- Two USB ports for keyboard & mouse control
- Diagnostic LEDs for power and link activity status
- Built-in ESD protection system
- Available for both singlemode and multimode applications
- Multimode distances available in excess of 500 meters
- Singlemode unit supports distances up to 30km

## SYSTEM DESIGN



# RC-V1BD1A1TR-DVI Series

1-Channel Non-compressed DVI / 1-Channel Bi-directional Data / 1-Channel Forward Audio Transceiver

#### **SPECIFICATIONS**

DVI		Audio	
Signal Type	DVI DVI 1.2/1.3 & HDCP 1.1/1.2	Signal Type	Standard 3.5mm Stereo Audio
Video Resolution  Data	1280x720@50Hz, 1280x720@60Hz, 1920x1080(1080I)@50Hz, 1920x1080(1080I)@60Hz, 1920x1080(1080P)@50Hz, 1920x1080(1080P)@60Hz	Connector Optical Video&Audio Audio Data USB	LC DVI 3.5mm Audio Jack Port Terminal Screws Standard USB (Mouse/Keyboard)
Data Protocol	RS232/RS485	General	
Data Rate Optical	0~120kps	Power Supply Size Construction:	DC12V 1A 152 ×130 ×28.8mm Aluminum
Wavelength Optical Emitter	1310/1550nm SFP Laser	Finish: MTBF:	Paint
Optical Fiber	9/125u single mode	Operating Temp:	> 100,000 hours -35° C to +65°C
Number of Fibers	1	Storage Temp:	-45° C to +85°C

#### ORDERING INFORMATION

Part Number	Description	Fiber	Optical PWR Budget	
RC-V1BD1A1TS-DVI	1-CH DVI with 1-CH Bi-Data/1-CH Forward Audio TX	SM	20dB	30KM
RC-V1BD1A1RS-DVI	1-CH DVI with 1-CH Bi-Data/1-CH Forward Audio RX	SM	20dB	30KM
RC-V1BD1A1TM-DVI	1-CH DVI with 1-CH Bi-Data/1-CH Forward Audio TX	MM	10dB	500M
RC-V1BD1A1RM-DVI	1-CH DVI with 1-CH Bi-Data/1-CH Forward Audio RX	MM	10dB	500M

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

