

## User Manual for Fiber to Serial Media Converter Rack –VE09FSR



The Media Converter Rack is a 19 inch 2U Rack. Maximum 16 Multimode, Single mode optical transceivers can be installed in one Rack. The Rack not only reduces the number of tie wires and simplifies the structure, but also facilitates easy management and maintenance. Various Power Supplies with Single or Dual power supplies are available in the Rack.

### Features

1. 16 slots standard 19Inch 2U Rack.
2. Dual fans for cooling.
3. Well shielded power supply prevents electromagnetic radiations.
4. Switch Mode power supply supports stable and longtime operation, provides overvoltage and overcurrent protection, with ripple and noise less than 50mV.

### Installation

1. According to your needs, insert Media Cards in the slots and please cover the empty slots with front panel guides.
2. Connect the Power cord.
3. Power On the switch on the back of the chassis. The power indicator lamp on the back plate will glow.
4. Check the POWER Led's of the Media Converters. If Led glows then the power to the cards is normal, otherwise check the power to the chassis.

### Technical Specifications

- |                              |                                  |
|------------------------------|----------------------------------|
| 1. Slots                     | :16 slots                        |
| 2. Power supply              | : AC100-250V,50-60HZ             |
| 3. Working temperature range | : 0°C~50°C                       |
| 4. Storage temperature range | : -20°C~65°C                     |
| 5. Relative humidity         | : 5%~90%                         |
| 6. Dimensions                | : 423x285x91mm, 19Inch 2U height |

### RS-232/422/485 to Fiber Converter Cards

#### Features

- Converts RS-232/422/485 signal to SM/MM Fiber
- Extends RS-232/422/485 transmission distance: Up to 120 km with Single mode, Up to 2 km with Multi mode
- Supports baud rate up to 115.2 Kbps
- Auto Baud Rate Detection

**Specifications**

**Serial Communications**

RS-232 Signals : IN, OUT, GND  
 RS-422 Signals : T+, T-, R+, R-, GND  
 4-wire RS-485 Signals : T+, T-, R+, R-, GND  
 2-wire RS-485 Signals : D+, D-, GND  
 Baud Rate : 300 bps to 115.2 Kbps  
 Surge Protection : 15 KV ESD

**Fiber Communication**

Distance : Single mode fiber for 120 km, Multi-mode fiber for 2 km  
 Cable : SM: 8.3/125, 8.7/125, 9/125 or 10/125 μm  
           : MM: 50/125, 62.5/125, or 100/140 μm  
 Wavelength SM : 1310 nm, MM: 850/1310 nm  
 Min. TX Output SM : -9 dBm, MM: -16 dBm  
 Max. TX Output SM : -6 dBm, MM: -7 dBm  
 RX Sensitivity SM : -32dBm  
 LED : Tx: transmits Data from fiber, Rx: Receives Data from fiber, SD: Fiber connected, PWR: Power is active.

**Environment**

Operating Temperature : 0 to 60°C  
 Storage Temperature : -20 to 85°C  
 Humidity : 5 to 95% RH  
 Power Supply : 36V to 60 VDC or 110v to 240 VAC  
 Mechanical Dimensions: 127 x156 x 32 mm(Built-in power supply) (W x D x H)

**Interface : RJ45 interface**

1 422 R-  
 2 422 R+  
 3 232 OUT  
 4 GND  
 5 GND  
 6 232 IN  
 7 422 T+/485+

| RJ45 Interface Pin Number | Signal of VE09FSR | Connect to |
|---------------------------|-------------------|------------|
| <b>RS232</b>              |                   |            |
| 6                         | RXD               | TXD        |
| 3                         | TXD               | RXD        |
| 4                         | GND               | GND        |
| <b>RS485-2 Wire</b>       |                   |            |
| 7                         | TX+ /D+           | TX+        |
| 8                         | TX- /D-           | TX-        |
| <b>RS485-4 Wire</b>       |                   |            |
| 7                         | TX+ /D+           | RX+        |
| 8                         | TX- /D-           | RX-        |
| 1                         | RX-               | TX-        |
| 2                         | RX+               | TX+        |