The Radiant series VB136 transports HD-SDI (SMPTE 292), SDI (SMPTE 259) or DVB-ASI over fiber optic cable.

The innovative unit can be built with three variations, transmitter, receiver or transceiver for two way connections.

The standard rackmount unit can be configured with an SFP (LC) or other connectors. While the card cage and stand alone module offer an OC48 SFP pluggable LC connection.

The unit offers automatic detection of the input signal from 143 Mbps, 270 Mbps, 1.483 Gbps or 1.485 Gbps. If the signal does not lock the device will automatically bypass the reclocker. The VB136 offers complete status monitoring via front panel LED's.

Automatic cable equalization for up to 100 meters with Belden 1694A at 1.485 Gbps or 300 meters for signals with 270 Mbps.

Like most Radiant products the VB136 can be packaged in a standard 1RU rackmount, a stand alone module/can or housed in the CR200 card cage. In addition -48 power or redundant power supplies are available.
**SPECIFICATIONS**

**Signals**
- **Video**: SMPTE-292M HD-SDI, SMPTE-259M, SDI or DVB-ASI
- **Data Rate**: 143 Mbps to 1.5 Gbps
- **Signal Level**: 800 mV peak to peak +/- 10%
- **Return Loss**: >15 dB
- **Connector**: BNC - 75 Ohm

**Status Indicators:**
- Front Panel - Power, Optical Link, Signal Detect, HD IN/OUT
- Onboard - Lock IN/OUT and Laser status

**Optical**
- **Wavelength**: 850 nm, 1310 nm or 1550 nm
- **CWDM, DWDM in future**
- **Loss budget distance**:
  - 850 nm MM - 300 meters
  - 1310 nm SM - 2 km
  - 1310 nm SM DFB –15 km
  - 1550 nm SM DFB - 40 km
  - 1550 nm SM DFB/w APD 80 km
- **Number of Fibers**: 1
- **Optical Connector**: SC/APC, SC/UPC, LC* (LC only available on modular and card cage versions)

**General Characteristics**
- **Power Level**: 10W @ 90 to 240V AC for IRU
- **+12 VDC @ 1.0 A for modular and card cage**
- **Operating Temp**: 0° to 50° C
- **Humidity**: 0 to 95% RH, non-condensing
- **Size**:
  - Rackmount: 17.0” W x 13.0” D x 1.75” H
  - Module/can: 2.8” W x 3.75” D x 1.1” H
  - Card cage: 1 slot in CR200 card cage

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**Ordering Information**

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>MAX DISTANCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>VB136-T/-XYZ</td>
<td>SD/HD1 over Fiber Singlemode Transmitter</td>
<td>80 km</td>
</tr>
<tr>
<td>VB136-R/-XYZ</td>
<td>SD/HD1 over Fiber Singlemode Receiver</td>
<td>80 km</td>
</tr>
<tr>
<td>VB136-T/R-XY6</td>
<td>SD/HD1 over Fiber Singlemode Transceiver</td>
<td>80 km</td>
</tr>
</tbody>
</table>

**Note:**
- Specify X—packaging of the unit: U—1U rack mount, M—modular (standalone) mount
- Specify Y—connector type: A—SC/APC, E—SC,
- Specify Z—frequency 8=850 nm, 3=1310 nm or 5=1550 nm
- For higher optical budgets and distances, CWDM and DWDM systems, contact factory
- Due to product enhancements, specifications are subject to change without notice