Radiant’s series VB155 offers an efficient method of transporting ASI or serial digital streams over fiber.

The unit converts an electrical SDI or ASI signal to singlemode optical signal for transport over fiber. This system can combine up to 8 ASI signals onto one fiber for transmission from a studio to the CATV headend or between different hub-sites within a CATV system.

The standard product is a one stream unit over fiber, multiple streams use CWDM technology to optically multiplex up to eight ASI signals onto one fiber and transport the information up to 100 km and beyond. The VB155 is a plug and play system with no adjustments required.

The unit will not convert from ASI to Serial Digital or SDI to ASI.

Contact factory for other types of HDTV signals - SMPTE-259, 292.
## SPECIFICATIONS

### ASI
- **Signals:** 1 to 8 ASI streams
- **Bandwidth:** 270 MBS per ASI
- **Impedance:** 75 ohms
- **Connector:** BNC
- **Indicators:** POWER, LINK and INPUT LED’s
- **Jitter:**
  - Transmitter: 180ps
  - Receiver: 25ps

### Optical
- **Wavelength:** 1310nm, 1550nm, CWDM, DWDM
- **Number of Fibers:** 1
- **Power Budget:** see table below

### General Characteristics
- **Power:** 15W @ 90 to 240V AC
- **Operating Temp:** -20° to 50° C
- **Storage Temp:** -40 to 85° C
- **Humidity:** 0-95% non-condensing
- **Size:**
  - Rackmount: 17.0” W x 13.0” D x 1.75” H
  - Card Cage: 2 slots in CR200
  - Module: 2.8” W x 3.75” D x 1.1” H

### OPTICAL POWER BUDGET

<table>
<thead>
<tr>
<th>FIBER</th>
<th>WAVELENGTH</th>
<th>OPTICAL BUDGET</th>
<th>DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLEMODE</td>
<td>1310nm (single ASI only)</td>
<td>18db</td>
<td>50km</td>
</tr>
<tr>
<td>SINGLEMODE</td>
<td>1550nm (single ASI only)</td>
<td>18db</td>
<td>100km</td>
</tr>
<tr>
<td>SINGLEMODE</td>
<td>1310/1550nm (dual ASI only)</td>
<td>18db</td>
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</tr>
</tbody>
</table>

### ORDERING INFORMATION

**PART NUMBER** | **DESCRIPTION**
--- | ---
VB155D-T-YZN | Transmitter, Single ASI, 1310nm or 1550nm
VB155D-R-YZN | Receiver, Single ASI, 1310nm or 1550nm
VB155D2-T-YZ6 | Transmitter, Dual ASI, 1310/1550nm
VB155D2-R-YZ6 | Receiver, Dual ASI, 1310/1550nm
VB155DX-T-YZC | Transmitter, 2 to 8 ASI, CWDM
VB155DX-R-YZC | Receiver, 2 to 8 ASI, CWDM

**Note:**
- CR200 card cage option recommended for 3 or more streams to allow for future expansion
- Specify X—number of ASI streams,
- Specify Y—packaging of the unit: U—1U rack mount, M—modular (standalone), R—card cage rack mount
- Specify Z—connector type: A—SC/APC, E—SC, B—FC, Z—FC/APC, D—ST
- Specify N—wavelength: 3—1310nm, 5—1550nm
- Maximum attenuation can be increased
- Add –48VDC to part number for –48VDC power
- Add –RPS to part number for redundant power supply
- For DWDM systems, contact factory
- CR200 Card Cage Available for housing multiple units or multiple products
- For other types of HDTV or SDI signals, contact factory
- Due to product enhancements, specifications are subject to change without notice