

## ViaLiteHD<sup>®</sup> – IF 70/140 MHz

### IF 70/140 MHz fiber optic link

- Low noise
- Wide dynamic range
- Transmits all video, data and audio modulation formats
- Transmission distances of >50 km
- SNMP interface for remote monitoring, system programming and control
- Multiple carrier transmission



The **ViaLiteHD** range of fiber optic links connect antennas with control rooms, network operation centres or broadcast headends.

**ViaLiteHD** links offer more than an alternative to coaxial cabling in teleport earth stations. They have been designed to provide a cost effective, technically superior installation:

- very low carrier-to-noise ratio
- extremely linear performance
- wide dynamic range.

Ultra wide dynamic range and a choice of manual, soft or automatic gain control settings address the challenges of varying signal intensity caused by meteorological conditions.



A range of electrical connector options is available, including 75Ω or 50Ω impedance with BNC, SMA or MCX connectors. Optical connector options include FC/APC, E2000/APC and SC/APC.

### Popular products

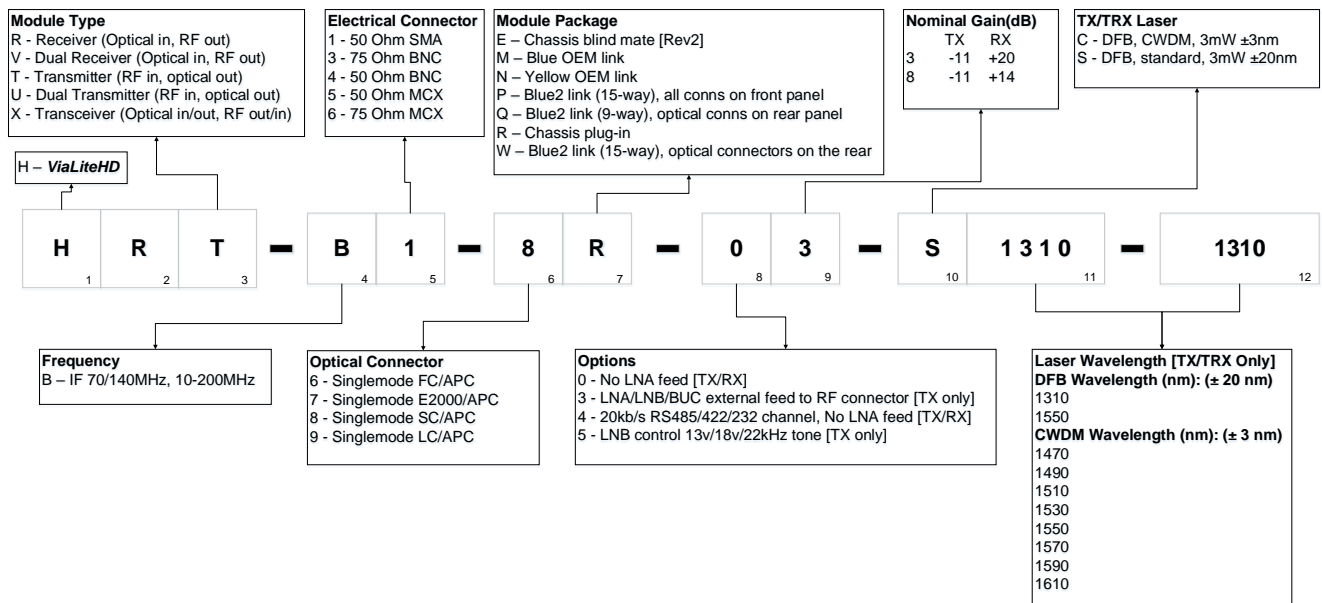
#### HRT-B1-8R-33-S1310

**ViaLiteHD** RF Link, Transmitter (E/O), IF 70/140 (10-200 MHz), 50 Ohm SMA, Singlemode SC/APC, Rack plug-in module, External LNA/LNB or BUC DC voltage feed to RF input or output conn', -11dB RF Gain, DFB Laser, Wavelength 1310 +/- 20 nm.

#### HRR-B1-8R-03

**ViaLiteHD** RF Link, Receiver (O/E), IF 70/140 (10-200 MHz), 50 Ohm SMA, Singlemode SC/APC, Rack plug-in module, No LNA Feed, 20dB RF Gain.

Product configurator

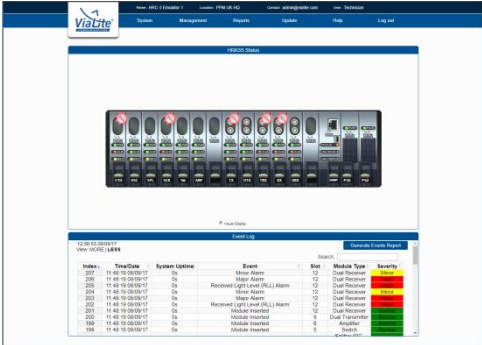
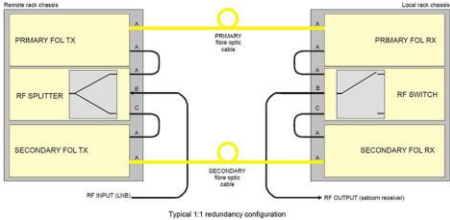




Technical specification

	Units	Note	Product name
Transmitter (Tx)			HRT-B1-8R-33-S1310 (example)
Receiver (Rx)			HRR-B1-8R-03 (example)
Frequency range	MHz		10-200 MHz
Impedance, RF connector			50 Ω SMA
VSWR	(typ)		1:1.5
Transmitter (Tx) gain, default	dB (typ)	<sup>a</sup>	-11 +/- 0.5
Receiver (Rx) gain, default	dB (typ)	<sup>a</sup>	+20 +/- 0.5
Link gain (Tx & Rx), default	dB (typ)	<sup>a</sup>	+9 +/- 1.5
Flatness, fullband	dB (typ)	<sup>a h</sup>	±0.2
Gain stability	dB (typ)	<sup>a</sup>	0.25 @ 24hrs
P1dB <sub>input</sub>	dBm (typ)	<sup>a</sup>	-1
IP3 <sub>input</sub> , at default gain	dBm (typ)	<sup>a</sup>	11
Noise figure, at default gain	dB (typ)	<sup>a</sup>	19
SFDR	dB/Hz <sup>2/3</sup> (typ)	<sup>a</sup>	110
Maximum input power without damage	dBm (min)		15
Laser type			DFB (Distributed feedback) laser
Optical wavelength	nm		1310 ± 20
Optical power output	dBm (typ)		4.5
Operating temperature range			-20 °C to +60 °C
Storage temperature range			-40 °C to +70 °C

<sup>a</sup> nominal input power @ 0dB optical loss  
<sup>h</sup> default gain setting

Supporting products

Type	Key Features
<p><b>SNMP/Web Browser Card</b></p> 	<ul style="list-style-type: none"> <li>• Easy to use graphical user interface (GUI)</li> <li>• Real time monitoring of card performance</li> <li>• Alarm monitoring and event logging</li> <li>• Control of gain adjustment</li> <li>• Compatible with all <b>ViaLiteHD</b> rack chassis and modules</li> <li>• Easy integration with network management systems (NMS) using management information base (MIB) tables</li> <li>• Actively manage redundancy switching</li> <li>• New RF cards can be automatically reprogrammed with the previous card parameters</li> <li>• Remote SNMP to local SNMP connection via optical fiber</li> <li>• Provides remote LAN 10/100/1000 Ethernet</li> </ul>
<p><b>Dual Redundancy</b></p> 	<ul style="list-style-type: none"> <li>• 1:1 redundancy for L-Band</li> <li>• Maximizes link up-time</li> <li>• Can be used to backup copper coax</li> <li>• Manual and automatic control via SNMP</li> <li>• Flexible configuration options</li> <li>• Other redundancy options available</li> </ul>
<p><b>Rack Chassis</b></p> 	<ul style="list-style-type: none"> <li>• 3U accepts up to 13 RF or Support cards, plus an SNMP card and dual power supplies</li> <li>• A 1U chassis accepts up to 3 RF or Support cards or 2 cards and an SNMP card (with dual power supplies)</li> <li>• Up to 26 channels per 3U chassis (using dual RF cards) – reducing the amount of rack space required</li> <li>• Blind mate option</li> <li>• All modules hot-swappable and auto-reconfigure with SNMP option</li> <li>• On-card LNB and BUC power options</li> <li>• Power fed through rear chassis connector to card Bias Tees</li> <li>• System can be monitored and controlled remotely via SNMP using a web browser</li> </ul>
<p><b>Outdoor Enclosures</b></p> 	<ul style="list-style-type: none"> <li>• CE approved and EMC compatible</li> <li>• IP rated and NEMA approved</li> <li>• Plug and play format</li> <li>• Suitable for harsh environments</li> <li>• All modules hot swappable</li> <li>• Dual redundant power options</li> <li>• Interface for monitor and control (M&amp;C) systems</li> </ul>