

L-band fibre optic link

- Superior linearity and low noise
- Ultra-wide dynamic range
- Serial digital channel to 20kb/s on same optical path.
- Transmission distances of >50km
- LNB/BUC power and on-module LNB switching options
- SNMP interface for remote monitoring, programming and control
- Suitable for multiple carrier up or down links

Advanced satcom technology

The *ViaLiteHD* range of fibre optic links are designed to connect antennas with control rooms, network operation centres or broadcast head ends.

ViaLiteHD links have been designed to provide a cost effective, technically superior installation:

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





Options include:

- 50Ω electrical connectors: SMA, MCX, (BNC)
- 75Ω electrical connectors: BNC, MCX
- Optical connectors: SC/APC, LC/APC, FC/APC & E2000/APC
- 1310/1550nm and ITU CWDM wavelengths
- Test ports on Tx and Rx modules
- LNB powering through RF connection
- OEM and Edge OEM small format modules available
- Blind-mate connectivity (SC/APC and SMA/BNC)
- LNB control circuit with 13/18VDC & 22kHz tone
- Serial digital channel to 20kb/s on same optical path
- High power and dual isolated lasers for high end applications

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.

ViaLiteHD fibre optic links are available as rack mounted cards, small form factor modules and Edge OEM modules.

A fully populated 19" 3U ViaLiteHD rack supports up to 26 channels and accepts 13 RF and accessory cards plus an SNMP or summary alarm card and dual power supply modules. A 1U chassis accepts three RF cards or two RF cards plus an SNMP card.

Small form factor modules offer a compact, single link solution and Edge OEM modules allow system integrators and equipment manufacturers to build RF/optical interfaces into their own design.

A range of support modules and accessories including indoor rack equipment and weatherproof outdoor enclosures are also available.

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RF Performance Characteristics

	L-band link (50Ω)		L-band link (75Ω)
Frequency range	950-2150MHz		
Impedance, RF connector	50Ω SMA, blind-mate		75Ω BNC, blind-mate
VSWR	1:1.5(typ)		
Link gain (Tx /Rx)	+9 (-11/+20)dB (nom) ^{a h}		+3 (-11/+14)dB (nom) ^{a h}
Flatness (full band)	±0.5dB (typ) ^{a h}		±0.6dB (typ) ^{a h}
Gain stability	0.25 @ 24hrs dB (typ)		
P1dBinput	-1dBm (typ) ^{a k}		0dBm (typ) ^{a k}
IP3 input	11dBm (typ) ^{a k}		12dBm (typ) ^{a k}
Noise figure	20dB (typ) ^{a k}		21dB (typ) ^{a k}
SFDR	110dB/Hz ^{3/2} (typ) ^a		110dB/Hz ^{3/s} (typ) ^a
Maximum input power	15dBm (min)		15dBm (min)
^a nominal input power @ 0dB optical loss		ault gain setting	^k measured @ 1.2GHz

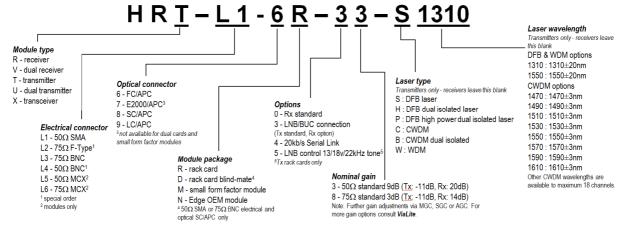
Optical Performance Characteristics

	L-band link	
Laser type	Distributed feedback (DFB) laser	
Optical wavelength	1310nm ± 20nm (1550nm/CWDM options)	
Optical power output	4.5 dBm (nominal)	

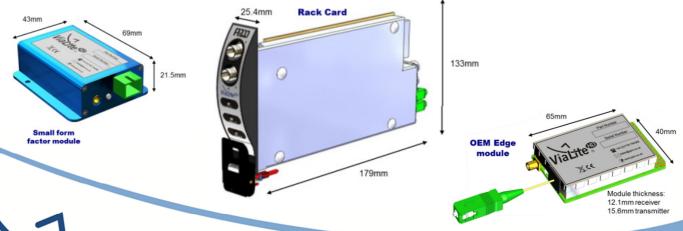
Temperature Characteristics

	L-band link
Operating temperature	-20degC to +50degC
Storage temperature	-40degC to +70degC

Part Numbering



Mechanical Dimensions





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