



# RF Over Fiber Systems

## UHF and VHF fibre optic link

- Ultra-wide dynamic range
- Transmits all video, data and audio modulation formats
- Superior linear performance
- Very low noise
- Transmission distances of >50km
- SNMP interface for remote monitoring, system programming and control
- Multiple carrier transmission



### FLEXIBLE BROADCAST TECHNOLOGY

The ViaLiteHD broadband, wide dynamic range 10-1000MHz fibre optic link provides a transparent connection between RF communications equipment. It is ideal for VHF/UHF radio & TV signal distribution.

- Negligible degradation of signals due to noise or inter-modulation
- High link reliability
- Comprehensive alarm/status monitoring
- Suitable for almost any analogue or digital signal modulation including FM and QPSK
- Highly flexible product suitable for a large number of different installations

The UHF and VHF fibre optic link has options for either 0dB or +9dB link gain. For installations where the number of cross site fibre connections is limited the complete ITU range of CWDM transmitter wavelengths is offered allowing up to 18 channels to be carried on one fibre. Optical connector options include FC/APC, SC/APC and E2000/APC.



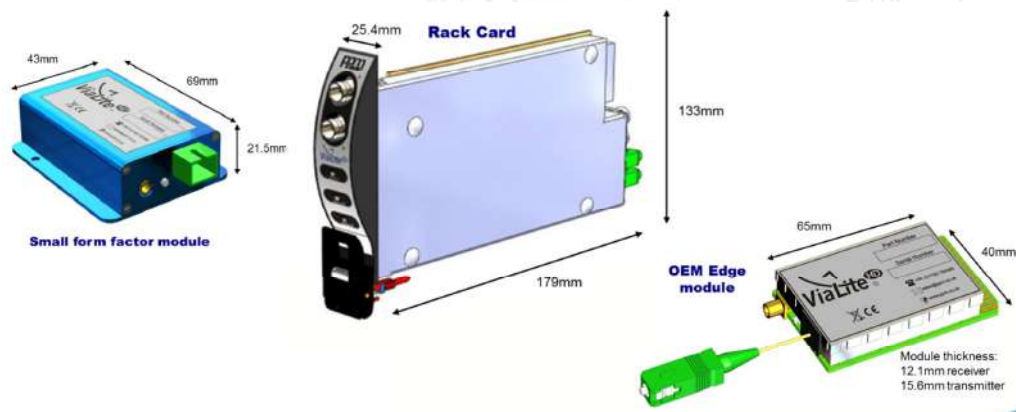
ViaLiteHD fibre optic links are available as rack mounted cards, small form factor modules and Edge OEM modules.

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 rack equipment and weatherproof outdoor enclosures are also available.

### MECHANICAL DIMENSIONS





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### RF PERFORMANCE CHARACTERISTICS

Frequency range	10-1000MHz
Impedance, RF connector	50Ω SMA
VSWR	1:1.5 (typ)
Link gain (Tx/Rx)	+9 (-11 / +20)dB (nom) <sup>a h</sup>
Flatness, fullband	±0.3dB (typ) <sup>a h</sup>
Gain stability	0.25 @ 24hrs dB (typ)
P1dB input	-1dBm (typ) <sup>a k</sup>
IP3 input	11dBm (typ) <sup>a h k</sup>
Noise figure	19dB (typ) <sup>a h k</sup>
SFDR	110dB/Hz <sup>2</sup> 3 (typ) <sup>a</sup>
Maximum input power	15dBm (min)

<sup>a</sup> nominal input power @ 0dB optical loss

<sup>h</sup> default gain setting

<sup>k</sup> Measured @ 500MHz

### OPTICAL PERFORMANCE CHARACTERISTICS

Laser Type	DFB
Optical Wavelength	1310nm ± 20nm (1550nm/CWDM options)
Optical Power Output	4.5dBm (typ)

### TEMPERATURE CHARACTERISTICS

Operating Temperature	-20°C to +50°C
Storage Temperature	-40°C to +70°C

### PART NUMBERS AND OPTIONS

