



RF Over Fiber Systems Wideband fibre optic link

- Superior linear performance
- Very low noise
- Ultra-wide dynamic range
- 10MHz - 3000MHz bandwidth
- Transmits all video, data and audio modulation formats
- Transmission distances of >50km
- Interfaces with M&C systems for remote monitoring
- Multiple carrier transmission



ULTRA-WIDE DYNAMIC RANGE

ViaLiteHD fibre optic links provide a high performance, high reliability, transparent cross-site connection between RF communications equipment. They are ideal for low frequency radio and distribution of wireless standards such as cellular, Wi-Fi and WiMAX. The ultra-wide dynamic range results in negligible degradation of signals due to noise or inter-modulation effects.

- Independent of data format
- Comprehensive alarm/status monitoring
- Suitable for most analogue or digital signal modulation including FM and QPSK
- High link reliability

The ViaLiteHD wide dynamic range broadband fibre optic links have 0dB 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, E2000/APC and SC/APC.



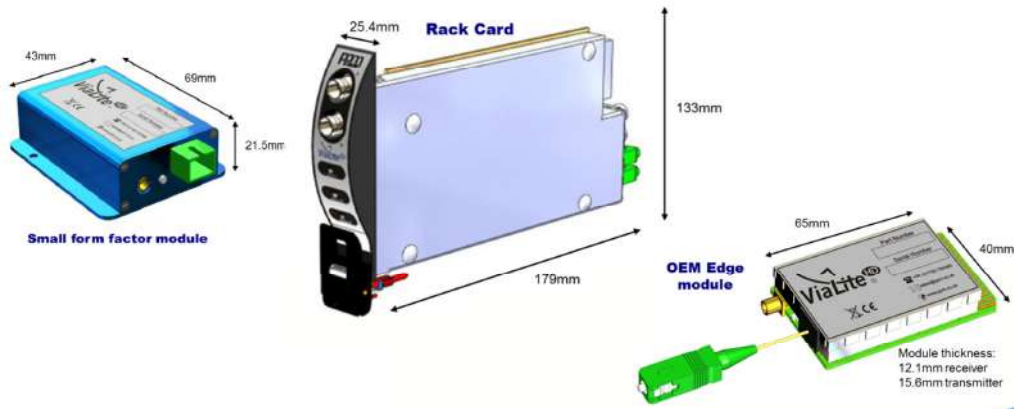
ViaLiteHD fibre optic links are available as rack mounted cards, small form factor modules and Edge OEM modules.

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





RF Over Fiber Systems

Wideband fibre optic link

RF PERFORMANCE CHARACTERISTICS

Frequency range	10 - 3000MHz
Impedance	50Ω (SMA connector)
Flatness	±0.7dB ^{t a}
VSWR (50 Ohm)	≤2:1 ^t
Maximum input power	+15dBm (without damage)
Gain stability	±0.25dB over 24 hrs
RF link gain (nominal)	0 dB ^a
nputIP3	11dBm ^{t a}
Input P1dB	2dBm ^{t a}
Noise figure	23dB ^{t a b}
SFDR	110dB/Hz ^{2/3 t a b}

^a @ 0dB optical loss

^b Calculated at 1200MHz

^t typical

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

