

## Ultra Wideband Fiber Optic Links

- **Superior linear performance**
- **Ultra low noise**
- **High spurious free dynamic range**
- **2kHz – 4.2GHz bandwidth**
- **Protocol transparent, transmits all video, data and audio modulation formats**
- **Transmission distances of >50km**
- **Interfaces with M&C systems for remote monitoring**
- **Multiple carrier transmission**
- **SNMP network control module compatible**

## Wide Dynamic Range Fiber Links

The **ViaLiteHD** broadband, wide dynamic range fiber optic links provides a high performance, high reliability, transparent cross-site connection between RF communications equipment. It is ideal for low frequency radio signal and cellular signal distribution amongst other applications.

The ultra-wide dynamic range results in negligible degradation of signals due to noise or inter-modulation effects. Operation is independent of data format, and together with its inherently low phase noise performance, it is suitable for almost any type of analogue or digital signal modulation including FM and QPSK. High reliability, comprehensive alarm/status monitoring and wide dynamic range result in a highly flexible product suitable for a large number of different installations.

The **ViaLiteHD** wide dynamic range broadband fiber optic links have 0dB link gain. For installations where the number of cross site fiber connections is limited the complete ITU range of CWDM transmitter wavelengths is offered allowing up to 8 channels to be carried on one fiber. Optical connector options include FC, E2000, SC and LC.



The **ViaLiteHD** system comprises up to 13 rack mounted cards plus SNMP card that plug into 19" 3U chassis/power supply. Alternatively up to 3 cards can be fitted into a 1U high 19" chassis, or standalone modules are available. A wide range of additional modules and accessories that might be required in any typical installation are also available in the **ViaLiteHD** range.

Also available in the **ViaLiteHD** range are the small form factor OEM modules that allow system integrators and original equipment manufacturers an easy route to build RF/optical interfaces into their own design.

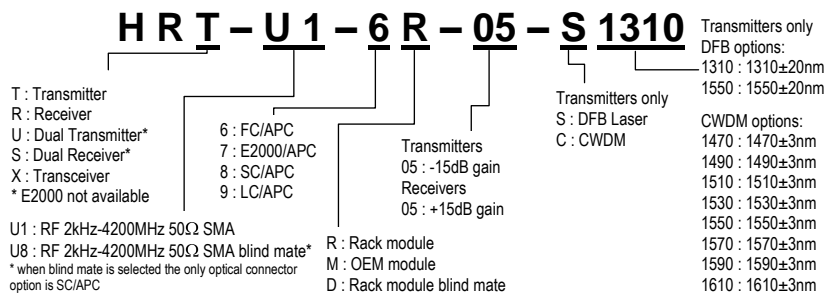
## RF Performance Characteristics

Rack Module 2kHz – 4200MHz Link	
Frequency Range	2kHz - 4200MHz
Impedance	50Ω (SMA connector)
Flatness	2kHz – 10MHz     ±2.5 / -1.5 dB (max) 10MHz – 3GHz     ±1.0 dB (max) 3.0GHz – 4.2GHz   ±1.5 dB (max)
VSWR (50 Ohm)	1:1.5
Maximum Input Power	+15 dBm (without damage)
Gain Stability	0.25 dB over 24 hrs
RF Link Gain (nominal)	0 dB <sup>a</sup>
Input IP3	14 dBm <sup>† a</sup>
Input P1dB	0 dBm <sup>† a</sup>
Noise Figure	23 dB <sup>† a</sup>
SFDR	110 dB Hz 2/3 <sup>ab †</sup>
<sup>a</sup> @ 0 dB optical loss <sup>b</sup> Calculated at 1200MHz <sup>†</sup> typical	

## Optical Performance Characteristics

Rack Module 2kHz – 4200MHz Link	
Laser Type	DFB
Optical Wavelength	1310 nm ± 20 nm (1550nm/CWDM options)
Optical Power Output	4.5 dBm (nominal)
Optical Connector	SC/APC (FC/APC, LC/APC and E2000/APC options)
All measurements at 25°C unless otherwise stated	

## Part Numbers and Options



## Mechanical Dimensions

