



RF Over Fiber Systems

GPS fibre optic link

- Suitable for a range of timing and synchronisation applications
- Transmits all common GPS / GALILEO / GLONASS bands
- Wide range of gain options
- Standard GPS power feeds
- GPS receiver alarm defeat feature
- Transmission distances of >50km
- SNMP network control module compatible

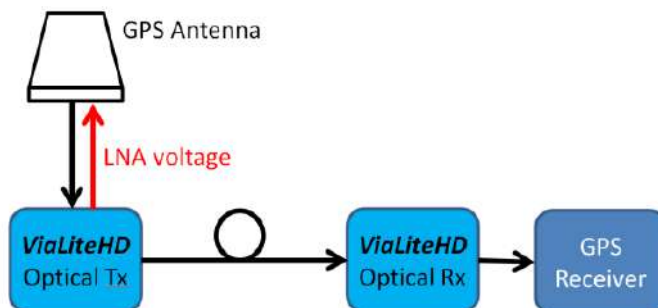


GPS OVER FIBRE

Many systems and networks need to maintain accurate synchronisation. The ViaLiteHD GPS link is ideal for providing a remote GPS signal or derived timing reference to equipment positioned where no GPS signal is available, for example inside a building, a tunnel or underground mine.

- Transmits L1 and L2 bands.
- Very low noise figure specifically for GPS signals
- Wide dynamic range means negligible signal degradation due to noise or interference.

In a typical installation the ViaLiteHD GPS fibre optic link acts as a very low loss extension between the GPS antenna and receiver as shown on the right.



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

Frequency Range	1000-1800MHz
Link gain (TX gain / RX gain), default	(-5 / +5), 0dB (nom)
Flatness (full band)	±0.3dB (typ)
Gain Stability	0.25dB (typ) @ 24 hrs
VSWR (50 Ohm)	1:1.5 (typ)
Noise Figure (at default gain)	15dB (typ)
Input P1dB	-8dBm (typ)
Input IP3 (at default gain)	4dBm (typ)
Maximum Input Power	13dBm (min)
SFDR	109dB/Hz (typ)
LNA power	Internal +5V @ 80mA

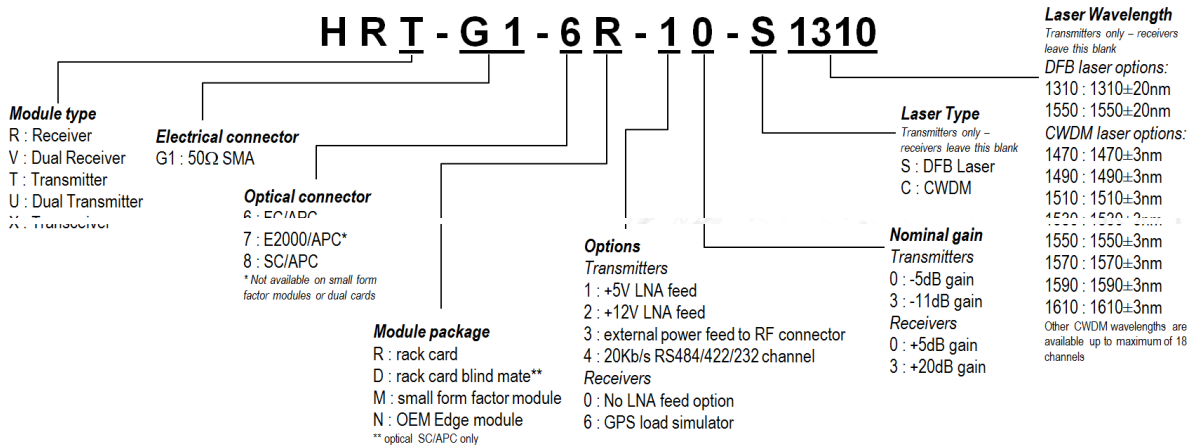
OPTICAL PERFORMANCE CHARACTERISTICS

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



MECHANICAL DIMENSIONS

