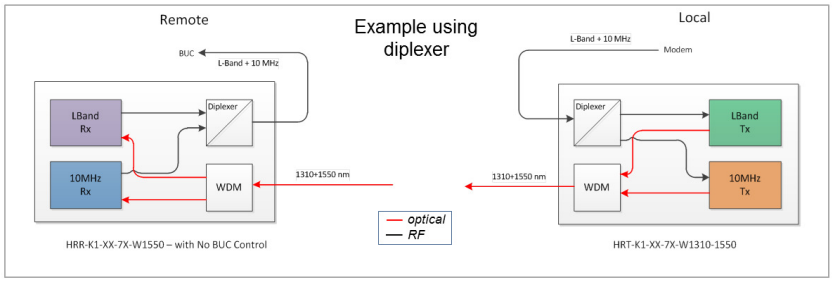
Transmit path L-band + reference link

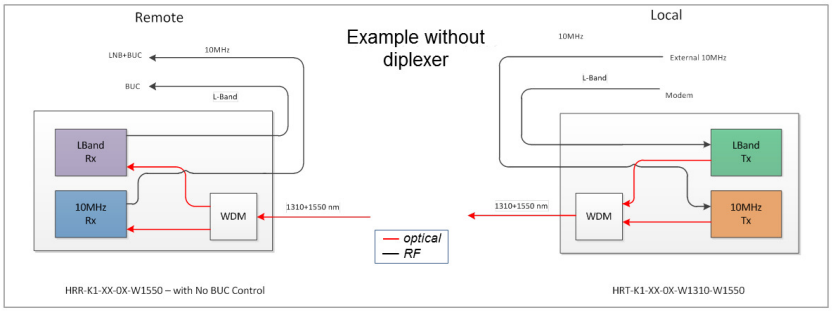
- ***Suitable for all modulation formats***
- ***Ultra-wide dynamic range***
- ***Negligible intermodulation***
- ***SNMP and web interface for remote monitoring and control***
- ***Multiple carrier transmission***

RF + reference over a single fibre

The ***ViaLiteHD*** L-band + reference link is designed for applications where remote equipment shares a common frequency reference – typically 10MHz – however the link will support reference signals in the range 5-20MHz.

- Reference and traffic signals are transported on different wavelengths to minimise intermodulation
- Requires only a single fibre
- Reference can be supplied on a single RF connection with the carrier signal or from separate input sources
- A multiplexed signal can be connected to the BUC/amplifier or demultiplexed and supplied to two separate RF connections
- Receive path link also available





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 links and accepts 13 RF cards plus an SNMP 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 is also available.

RF Performance Characteristics

	L-Band	Reference	L-Band	Reference
Impedance	50 ohms, duplexed		75 ohms, duplexed	
Frequency range	950 - 2150 MHz	5-20 MHz	950 - 2150 MHz	5-20 MHz
Flatness	± 1.5 dB (max) [a d] ± 0.5 dB (typical) [a d] ± 0.2 dB in any 36 MHz [a t]	± 0.5 dB (typical) [a d]	± 1.5 dB (max) [a d] ± 0.8 dB (typical) [a d] ± 0.2 dB in any 36 MHz [a t]	± 0.5 dB (typical) [a d]
VSWR (50 Ohm)	1:1.5 [t]		1:1.5 [t]	
IMD	-62 dBc [t c]	-	-50 dBc [t c]	-
CNR	57 dB [t b]	-	55 dB [t b]	-
Test input / output signal	-20 dBm	0 dBm	-20 dBm	0 dBm
Maximum input power	+15 dBm (without damage)		+15 dBm (without damage)	
Gain stability	0.25 dB over 24 hours		0.25 dB over 24 hours	
RF link gain (nominal)	+9 dB [a]	0 dB [a]	+3 dB [a]	0 dB [a]
Input IP3(at default gain)	+12 dBm [t c]	-	+12 dBm [t c]	-
P1dB (at default gain)	0 [t] dBm	+10 dBm	0 dBm	+4 dBm
Noise figure(at default	20 dB [t a]	34 dB [t a]	22 dB [t a]	34 dB [t a]
LNB power (optional)	Internal 13/18V @ 700mA, with switchable tone		Internal 13/18V @ 700mA, with switchable tone	
SFDR	110 dB Hz 2/3 [t a]	-	109 dB Hz 2/3 [t a]	-
Reference sidebands	55 dBc [t]	-	50 dBc [t]	-

Optical Performance Characteristics

	L-Band	Reference
Laser type	DFB	DFB
Optical wavelength	1550 nm ± 20 nm	1310 nm ± 20 nm
Optical power output	3.5 dBm (nominal)	3.5 dBm (nominal)
Optical connector	SC/APC (E2000/APC and FC/APC options)	SC/APC (E2000/APC and FC/APC options)

Temperature Characteristics

	L-band + 10MHz Link
Operating temperature	-20℃ to +50℃
Storage temperature	-40℃ to +70℃

Part Numbering and options

H R T - K 1 - 8 D - 7 3 - W 1310

Product type
R : Receiver , optical in/electrical out
T : Transmitter, electrical in/optical out

Laser wavelength
1310 : 1310±20nm
1550 : 1550±20nm

Nominal L-Band gain

	Tx	Rx
3 :	-11dB	+20dB
5 :	-15dB	+15dB
8 :	-11dB	+14dB

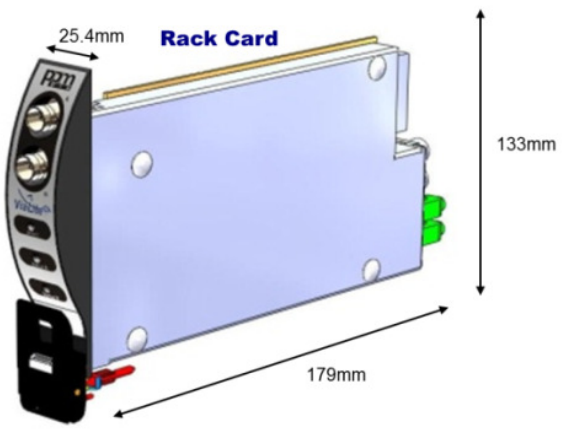
Electrical connector
1 : SMA 50Ω
3 : BNC 75Ω

Optical connector
6 : single mode FC/APC
8 : single mode SC/APC

Product package
R : Rack card
D : Rack card blind mate*
**SC optical connectors only*

Options
0 : No LNA feed
3 : LNA/LNB/BUC feed to RF connector from rack to rear panel
5 : LNB control 13v/18v/22kHz tone (Tx only)
7 : Dual module with RF duplexer
8 : Dual module with RF duplexer and LNB control 13v/18v/22kHz tone

Mechanical Dimensions



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