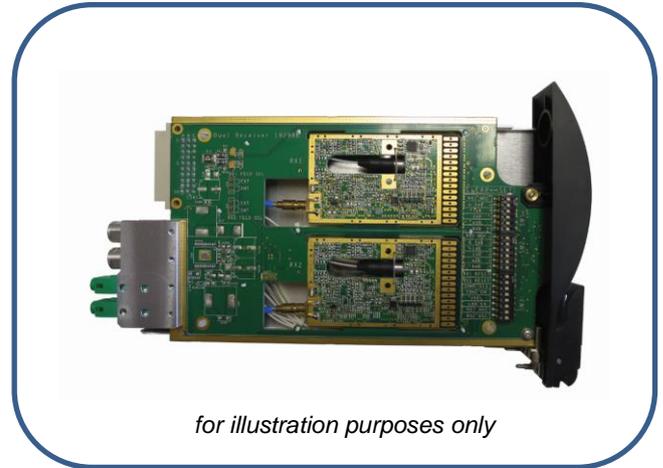


ViaLiteHD[®] – High Sensitivity Receiver

High Sensitivity Receiver (HSR)

- Enabler for high loss optical paths
- L-Band HTS (700-2450 MHz)
- Flat response 1 dB peak-to-peak
- Wide wavelength response
- Supports link losses equivalent to 140 km
- Negates need for EDFA or optical Amp
- Excellent SFDR with low optical input



The High Sensitivity Receiver (HSR) has been designed for high loss environments where there are lots of splices/interconnects or low quality infrastructure. It mitigates or reduces the need for EDFAs, even working with CWDM and long distance systems where EDFAs are not available.

The HSR comes in **ViaLiteHD** chassis card format and can be used in combination with Hyper Wide Dynamic Range (HWDR) cards for best performance in high optical loss situations.

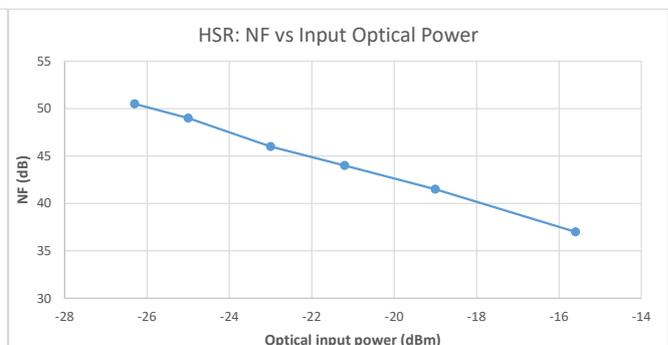
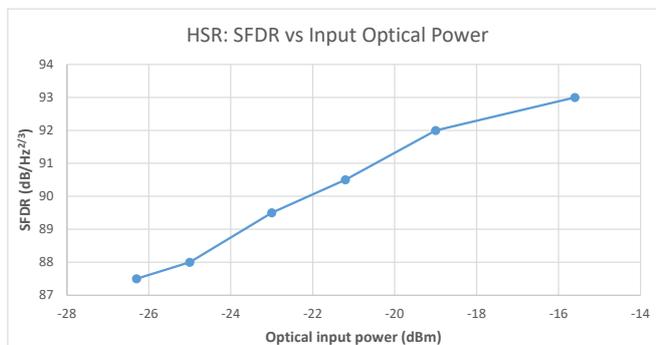
With excellent Spurious Free Dynamic Range (SFDR) and designed for optical losses between 22-32 dB, the HSR is a failsafe when the optical environment is not under the user's control.

Applications

- 70 km, 1310 nm, 90 dB SFDR unity gain link
- CWDM (1270-1610) high optical loss links
- 140 km 1550 nm 90 dB high reliability SFDR link over dispersion shifted fiber
- Point to multipoint 'high optical fan-out loss' distribution

Enclosure formats

- 3U 19" Chassis
- 1U Chassis



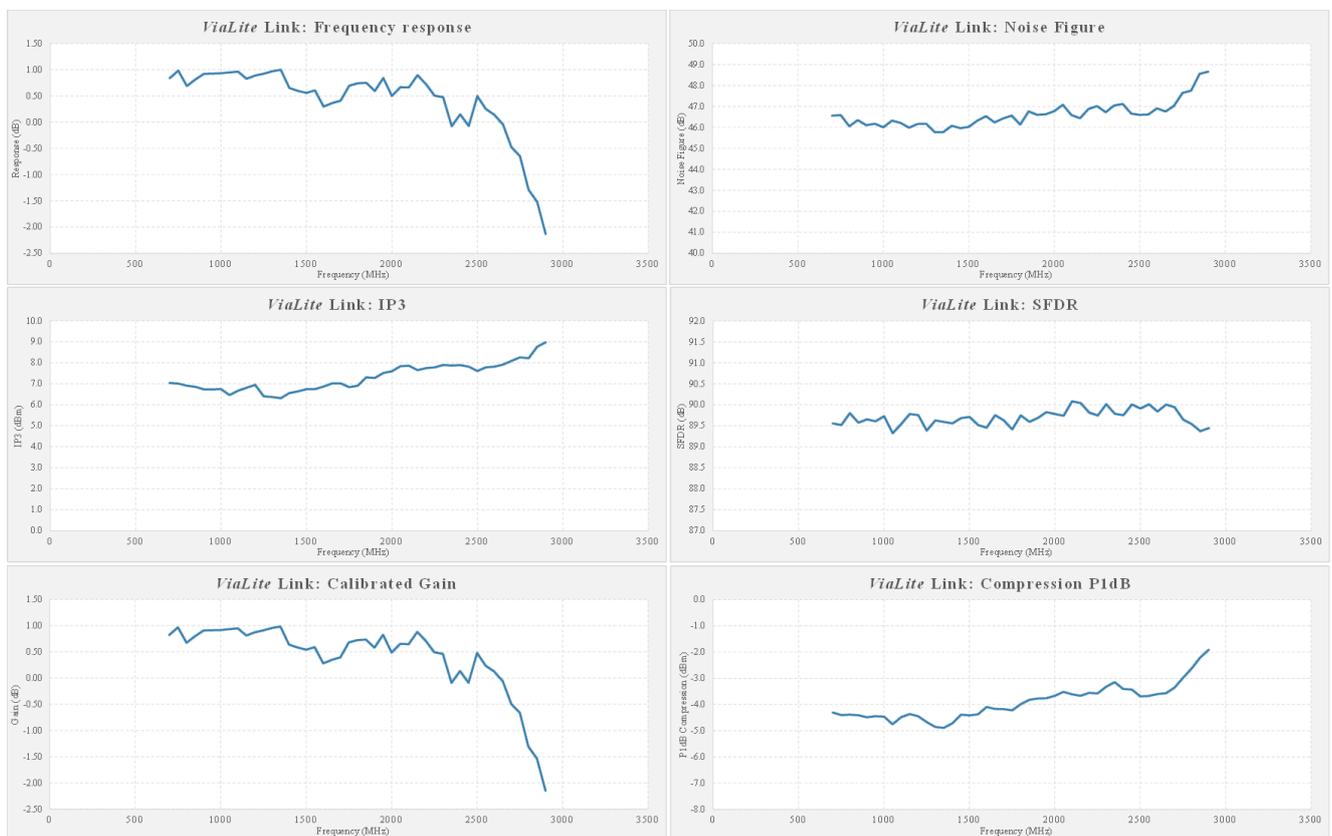
Specification

Parameter	High Sensitivity Receiver
Frequency Range	700-2450 MHz
Impedance	50 Ω SMA RF connector
VSWR	1:1.5
Flatness	±0.5 dB Full band
Link Gain*	0dB (-15dBm to -25 dBm optical input)
Link SFDR*	93.9 dB/Hz ^{2/3} @ -15 dBm optical input 91.9 dB/Hz ^{2/3} @ -20 dBm optical input 88.0 dB/Hz ^{2/3} @ -25 dBm optical input
Link Noise Figure*	40.0 dB @ -15 dBm optical input 43.0 dB @ -20 dBm optical input 49.0 dB @ -25 dBm optical input
Link IP3	7.0 dBm
Optical input range	-28 to -15 dBm

*Performance when paired with HWDR S1 transmitter card

Performance graphs

HSR paired with HWDR S1 transmitter card and 29 dB optical loss



Popular products

HRR-L1-8R-3H

ViaLiteHD, Receiver, L-Band, SMA, SC APC, Chassis Card, LNA external feed option to RF Port, +18 Gain, High Sensitivity Receiver