

- **L-band, GPS or broadband 10MHz to 3GHz**
- **Low loss and high isolation**
- **DC switching and pass-through**
- **Compatible with Satcom6 intelligent outdoor enclosure**

ViaLiteHD RF switching

The **ViaLiteHD** RF switch is a 3-port switch that can be used with the **ViaLiteHD** RF splitter/combiner module to provide a 1:1 redundant link in a range of applications including L-band, GPS and wide-band systems.

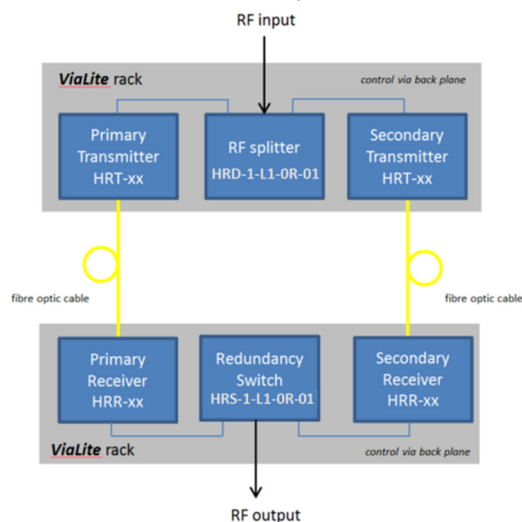
Complete Redundancy

Together with dual redundant power supplies, these modules provide the highest possible availability for a **ViaLiteHD** RF over fibre system. The system can be mounted in a **ViaLiteHD** rack or outdoor enclosure which allows system control via the backplane.



Typical Configuration

In a typical configuration, an RF signal is split and fed to two transmit modules. These modules are connected via separate optical fibres to two corresponding receiver modules, thus forming primary and secondary paths. The RF outputs of the receivers are connected to the redundancy switch. The RF output on the common port is fed to the user equipment. The equipment backplane connects the switch to adjacent modules and ensures that the switch selects the secondary path in the event of a failure in the primary path. When used with an SNMP controller it is possible to reconfigure the switch and directly control its functions.



Typical 1:1 redundancy configuration

DC and 22kHz Tone Switching (optional)

The switch allows DC and a 22KHz tone to be switched from the primary to the secondary path, ensuring continuity of power to the LNB without power level conflicts. The DC and tone switching pass-through allows the LNB to be set and controlled in either high or low band as well as allowing changes in polarization.



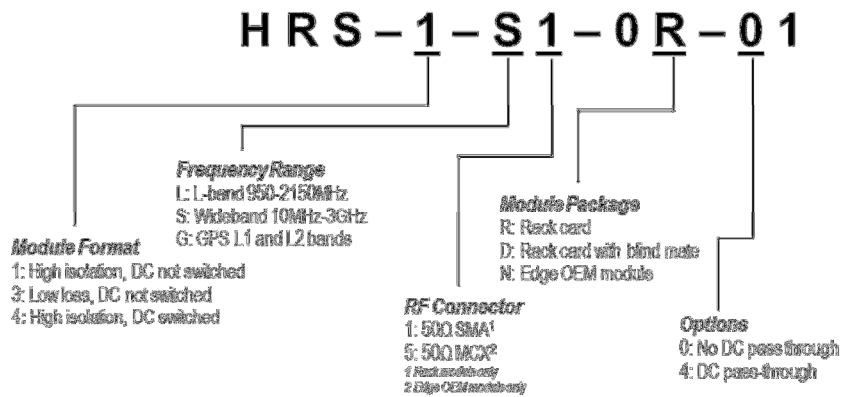
3-port Switch RF Performance Characteristics

	L-Band (50Ω)	L-Band + DC (50Ω)	Wideband (50Ω)	Wideband +DC (50Ω)
Module	HRS-1-L1-0R-01	HRS-4-L1-0R-41	HRS-1-S1-0R-01	HRS-4-S1-0R-41
Frequency Range	950-2150 MHz		10-3000 MHz	
Impedance, RF connector	50Ω SMA (rack card only) or 50Ω MCX (Edge OEM module only)			
VSWR (typ)*	1:1.5			
Max input signal	+24 dBm			
Insertion loss (typ)	1.8dB	2.3 dB	10-50 MHz – 2.0dB 50-1000 MHz – 1.7 dB 1000-3000 MHz – 2.5 dB	10-50 MHz – 3.0dB 50-1000 MHz – 2.5dB 1000-3000 MHz – 3.0dB
Isolation (typ)	60dB	60dB	10-50 MHz – 70dB 50-1000 MHz – 70dB 1000-3000 MHz – 60dB	
Flatness full band (typ)	±0.3dB	±0.4dB	±0.5dB	±0.5dB
DC pass-through max current	-	0.8A	-	0.8A

Temperature Characteristics

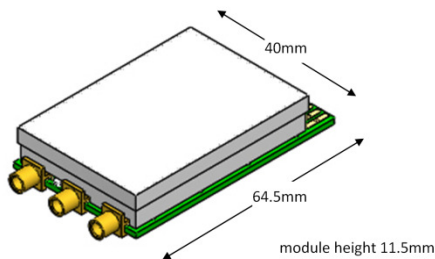
	All products listed above
Operating temperature	-10°C to +50°C
Storage temperature	-40°C to +70°C

Part Numbering and options



Mechanical Dimensions

Edge OEM module



Rack card

