

ViaLiteHD® - Local Integrated GPS Splitter

Local Integrated GPS Splitter

- 1U optical GPS chassis
- Point to multipoint
- 1x8, 2x8, 4x8, 1x16, 2x16 GPS splitter
- Up to 4 GPS receivers
- Built-in SNMP card
- Splitting with GPS RX gain
- Range of RX modules
- 5-year warranty



The **ViaLiteHD** GPS Splitter (HRK-12-xxx-G9-x-AC) is designed to minimize rack space. The chassis is available with 1-4 RF over fiber receivers with 8-32 outputs depending on configuration and only uses 1RU of rack space. All 8-32 channels can be lossless when paired with correct RX gain on the **ViaLiteHD** GPS RF over fiber receiver.

All RF over fiber cards are blind mate, which coupled with **ViaLite's** long service life, ensures five nines (99.999%) reliability.

The chassis has dual redundant PSUs as well as built-in SNMP control. It has been designed for easy installation in a GPS fan-out system and is ideally suited to applications where the user requires multiple GPS timing/sync. in one area. The chassis can be used with a direct GPS link to the roof or combined with the **ViaLiteHD** RF over fiber modules. It can feed multiple floors/rooms with up to 32 local GPS connections and no system loss.

Options

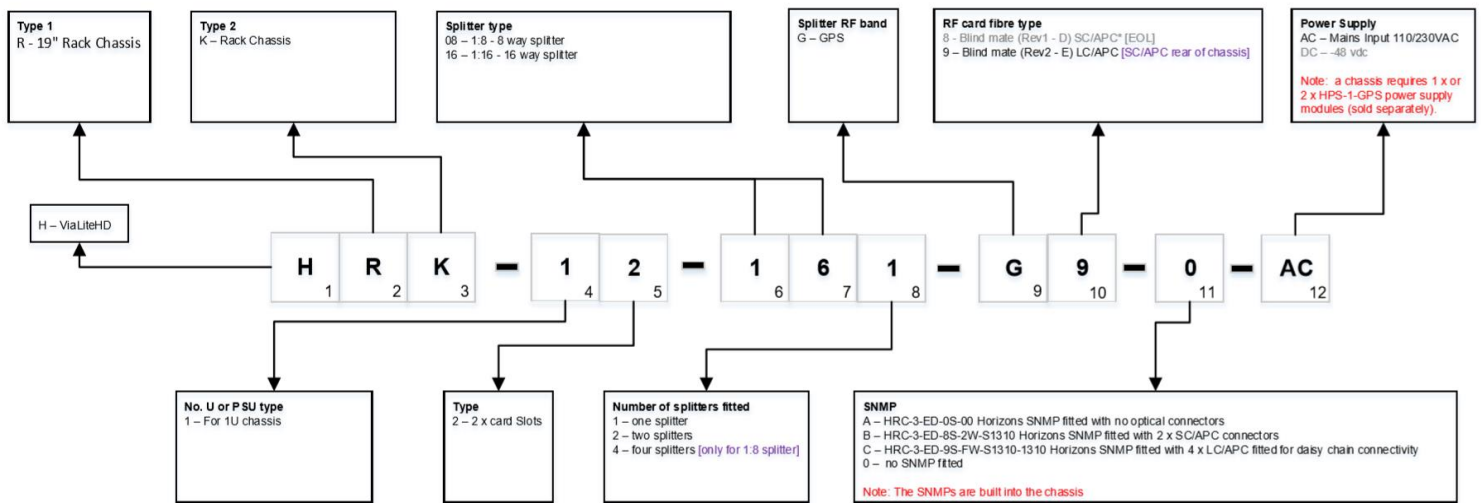
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|----------------------------|---------------------------|
| • GPS RF Splitter Outputs: | 8,16 and 32 |
| • Optical RX: | Up to 4 Optical Receivers |
| • Optical connections: | Blind mate hot swappable |
| • Built in SNMP control: | Internal HRC-3 SNMP |
| • Built in Amplifier: | Up to +25 dB Gain |
| • Mains Power: | 240 VAC Dual PSU |
| • DC Input: | +48 VDC Input |

Note: All splitter ports are terminated with a 50 Ohm terminator as standard.

Applications

- | | |
|----------------------------------|---|
| • Data Center timing | • University timing distribution |
| • Banking institution timing | • Fixed Satcom earth stations and teleports |
| • Scientific timing distribution | • Oil and gas platforms |
| • Cellular test environments | • Big data |

Product configurator



Recommended cards

Accepts 2x GPS RX Cards +5 dB (HRR-G1-9E-60-GSR) – Single optical input
Accepts 2x GPS RX Cards +5 dB (HRV-G1-9E-60-GSR) – Dual optical input

Accepts 2x GPS RX Cards +15 dB (HRR-G1-9E-65-GSR) – Single optical input
Accepts 2x GPS RX Cards +15 dB (HRV-G1-9E-65-GSR) – Dual optical input

Accepts 2x GPS RX Cards +25 dB (HRR-G1-9E-66-GSR) – Single optical input
Accepts 2x GPS RX Cards +25 dB (HRV-G1-9E-66-GSR) – Dual optical input

Examples

Part Number	Splitters					
	Insertion Loss (dB)	8	16	2x8 (16)	4x8 (32)	2x16 (32)
HRK-12-081-G9-B-AC	11	X				
HRK-12-161-G9-B-AC	15		X			
HRK-12-082-G9-B-AC	11			X		
HRK-12-084-G9-B-AC	11				X	
HRK-12-162-G9-B-AC	15					X

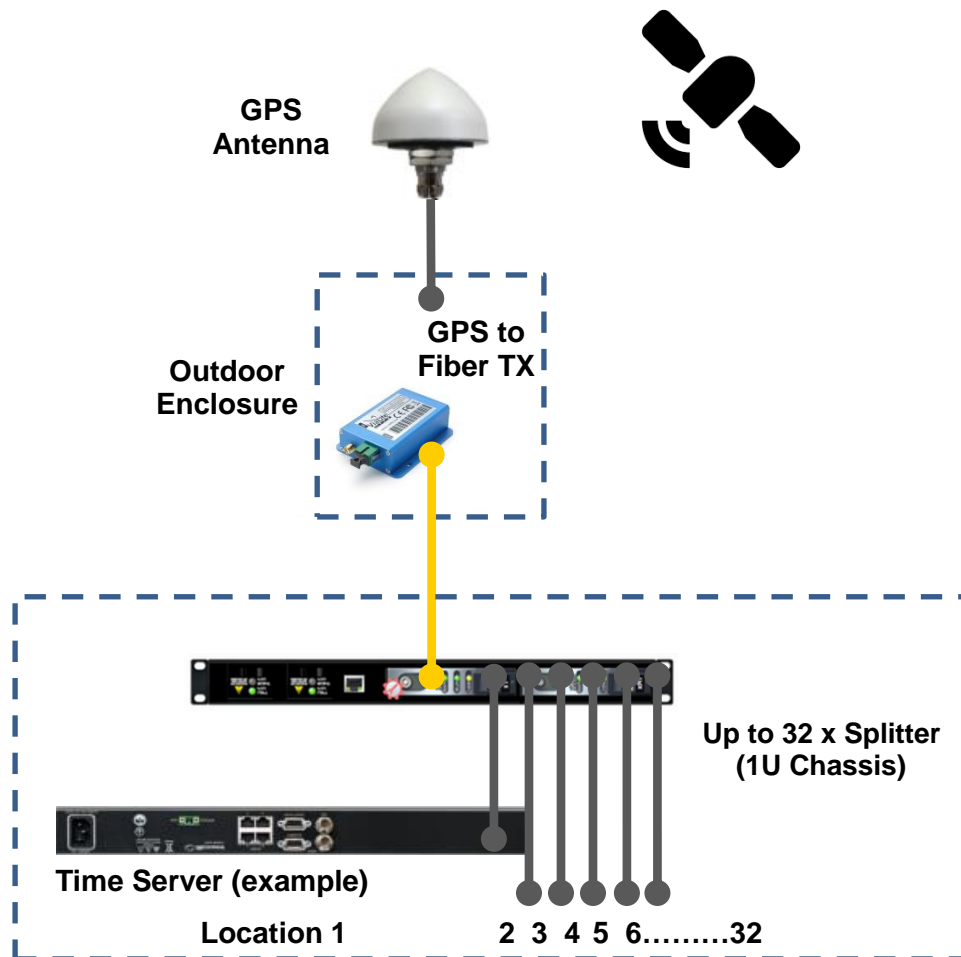
Part Number	RX Cards											
	RX1 (1x Input)	Gain (dB)	Overall Gain	RX2 (1x input)	Gain (dB)	Overall Gain	RX1 (1x Input)	Gain (dB)	Overall Gain	RX2 (2x input)	Gain (dB)	Overall Gain
HRK-12-081-G9-B-AC	HRR-G1-9E-65-GSR	15	-1									
HRK-12-161-G9-B-AC	HRR-G1-9E-66-GSR	25	5									
HRK-12-082-G9-B-AC	HRR-G1-9E-65-GSR	15	-1	HRR-G1-9E-65-GSR	15	-1	HRV-G1-9E-65-GSR					
HRK-12-084-G9-B-AC							HRV-G1-9E-65-GSR	15	-1	HRV-G1-9E-65-GSR	-15	1
HRK-12-162-G9-B-AC	HRR-G1-9E-66-GSR	25	5	HRR-G1-9E-66-GSR	25	5	HRV-G1-9E-65-GSR					

Related products

- GPS RF over fiber links kit 1310 nm
- Blue GPS OEM module
- ODE-A4 outdoor enclosure
- Multizone Distribution Splitters



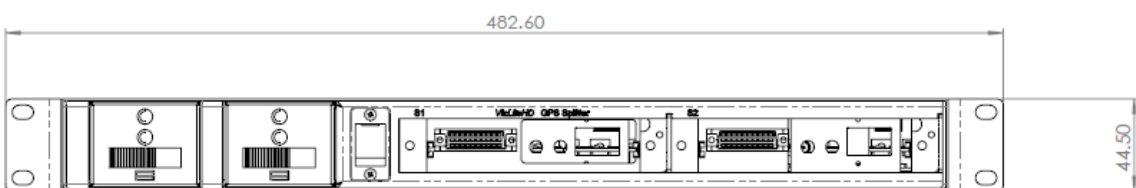
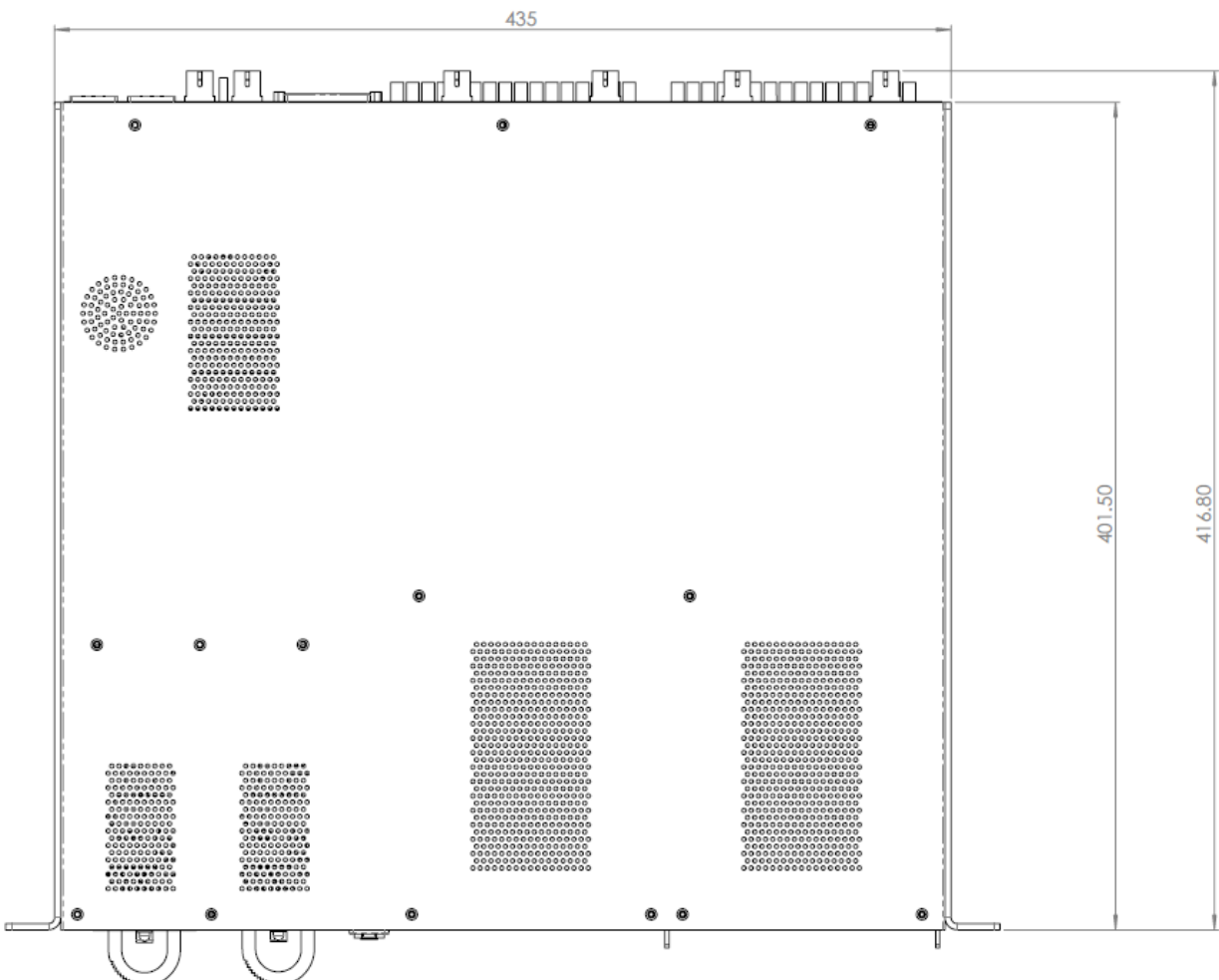
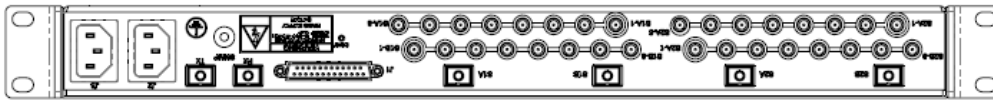
Typical configuration







Technical specification

	1U Chassis with built-in GPS splitter
Part Number	HRK-12-161-G9-0-AC
Frequency range	1000 -1800 MHz
Gain	+10 dB when Rx card fitted
Gain adjustment range	15.5 dB from Rx card
Number of card slots	2
Number of optical inputs	1-4 (1x single Rx card to 2 x Dual Rx card fitted)
Return loss	<-20 dB typical
Isolation port to port	<-23 dB typical
Phase balance	<0.5 dB typical
Power consumption	<12 W (fully configured)
SNMP Interface	RJ45
Input power	90-265 VAC
Operating temperature range	-20 °C to +55 °C
Storage temperature range	-40 °C to +80 °C
Humidity	95% non-condensing humidity
Dimensions	W:435 mm(19") H:44.50 mm (1U) D:416.8 mm
Weight	7.5 kg

Physical dimensions



Typically used with

Type	Key Features
<p>RF over Fiber GPS modules</p> 	<ul style="list-style-type: none"> • Transmits all common GPS, GALILEO and GLONASS bands • L1 and L2 GPS frequencies • Link operation 1 m to 50 km • >50 km systems also available • GPS antenna powering and monitoring • Time server load input/spoofing • Simple plug and play • MiFID II standard
<p>RF over Fiber Timing modules</p> 	<ul style="list-style-type: none"> • Radio timing signals: DCF, MSF signals JJY, BPC, HBG, TDF, WWVB, WWV, CHU, RJH, RWM • IRIG-B • Loran-C & eLoran • 10 kHz – 50 MHz signals • 1 PPS (via digital data link) • GPS (via GPS link) • MiFID II standard
<p>Multizone Lossless Splitter</p> 	<ul style="list-style-type: none"> • Point to multipoint • 8, 16, 32 & 64 way splitting with no loss • 1550 nm or DWDM wavelengths • Compatible with any RF frequency • 1U Rack chassis
<p>Outdoor Enclosures</p> 	<ul style="list-style-type: none"> • CE approved and EMC compatible • IP rated and NEMA approved • Plug and play format • Suitable for harsh environments • All modules hot swappable • Dual redundant power options • Interface for monitor and control (M&C) systems