

GPS-over-Fiber GPSoF16-2 (RX)

Description

The GPS-over-Fiber 16-2 (RX) receiver enables efficient timing signal optical to RF conversion and optical expansion for applications such as remote antenna connections in GNSS receiving systems. It enables seamless scalability for GNSS distribution in combination with Direct GPSoF.

Features

- Optical to RF signal conversion with 16 RF outputs
- 2 optical GNSS outputs for further signal distribution to additional receiving locations in the same optical network
- For GPS, Galileo, Glonass, BeiDou, IRNSS, QZSS and other GNSS systems
- Efficient low loss reference signal distribution (time and location)
- NEBS Level 3 carrier grade



Order Information

Item Description	Item Number
GPSoF16-2 (RX)	85145447

Electrical Data

Parameters		Value			Remarks	
		min.	typ.	max.		
All specifications at 25°C case Temperature T _c , unless otherwise specified						
GNSS band		L1+L2				
Gain (link with TX)	dB		11		optical path loss not included	
Gain flatness	dB		< 2			
Noise figure (link with TX)	dB		8		optical path loss not included	
VSWR (RF output)			< 2			
Time delay (link with TX) ¹			80		optical path delay not included	
Supply voltage		VDC	+ 10	+ 12	+ 35	<0.2 A
Temperature range	operating	°C	-5		+ 55	
	storage	°C	-40		+ 85	
RF output impedance		Ohm	50			
Module weight		kg / lbs	2.2 / 4.85			
Dimensions		mm / inches	285 x 430 x 44 / 11.2 x 19 x 1.75			19" 1RU
RF connectors			16 (SMA female)			
¹ Total link time delay calculation Total delay [ns] = time delay TX [ns]+ time delay RX [ns]+ Time delay single mode fiber 1310nm [ns/m] * link length [m] Example 100m link delay = 80 ns + 100m * 4.9 ns/m = 570 ns						

Optical Data

Parameters		Value			Remarks
		min.	typ.	max.	
All specifications at 25°C case Temperature T _c , unless otherwise specified					
Fiber optic connectors		LC/UPC			other connectors possible
Fiber		standard single mode 9/125 um			
Optical input power	mW			5	
Side mode suppression ratio	dB	30	40		

GPS-over-Fiber
GPSoF16-2 (RX)

Mechanical Data

Dimensions Outline Drawing: DOU-00391337

	Input	Output	Description	Interface	
		X	GPS out	SMA (female)	
	X		FO in	LC/UPC (simplex bulkhead)	
		X	FO out	LC/UPC (duplex bulkhead)	
	X		12 VDC in	3-pole connector jack	

Front View:



Back View:



Additional Information

- All modules are RoHS Compliant
- All modules are EMC protected
- MIL and other certifications are possible upon request.
- Various racks and enclosures available
- All modules are single packaged

Important catalogue links

RF Cables: <http://literature.hubersuhner.com/Technologies/Radiofrequency/RFCablesEN/>
RF Connectors: <http://literature.hubersuhner.com/Technologies/Radiofrequency/RFConnectorsEN/>
FO Standard Assemblies: <http://literature.hubersuhner.com/Technologies/Fiberoptics/FOcableassembliesEN/>

HUBER+SUHNER is certified according to ISO 9001, ISO 14001, ISO/TS 16949 und IRIS www.hubersuhner.com

Waiver: It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.