Data Sheet

HUBER+SUHNER

GPS-over-Fiber
GPSoF4 (TX) L1+L2

Description

The GPS-over-Fiber 4 (TX) transmitter enables efficient RF to optical GNSS signal conversion for applications such as remote antenna connection in GNSS receiving systems in combination with HUBER+SUHNER GPSoF modules.

Features

- RF to optical signal conversion with 4 FO outputs
- For GPS, Galileo, Glonass, BeiDou, IRNSS, QZSS and other GNSS systems
- Efficient low loss reference signal distribution (time and location)

Order Information

Item Description	Item Number
GPSoF4 (TX) L1+L2	85139263

Electrical Data

Parameters		Value			Remarks
		Min.	Typ.	Max.	
All specifications at 25°C case Temperature T_c , unless otherwise specified					
GNSS band	MHz		L1+L2		
Gain	dB	4	7	10	
Gain flatness	dB		< 2		
Noise figure	dB		14		
Spurious-free dynamic range	dB $Hz^{2/3}$		100		
Max. input at 1dB compression	dBm		-20		
Max. input power for no damage	dBm		+15		
VSWR (input and output)	dB		< 2		
OIP3	dBm		+ 7		
Time Delay[1]	ns		55		
Supply voltage V_S (Transmitter)	VDC	+ 12	+ 12	+ 15	
Temperature range (OTR) Operating	°C	-5		+ 55	
Temperature range (OTR) Storage	°C	-40		+ 85	
RF input impedance	ohm	50			
Module weight	kg / lbs	1.7 / 3.7			
Dimensions	mm / inches	285 x 430 x 44 / 11.2 x 19 x 1.75			
RF connectors		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 = 55 ns + 100m * 4.9 ns/m = 545 ns*

Optical Data

Parameters		Value			Remarks
		Min.	Typ.	Max.	
All specifications at 25°C case Temperature T_c , unless otherwise specified					
Fiber optic connectors		FC/APC			
Fiber		Single mode fiber 9/125 um			
Optical power in fiber	mW	6	8	10	
Side mode suppression ratio	dB	30	40		

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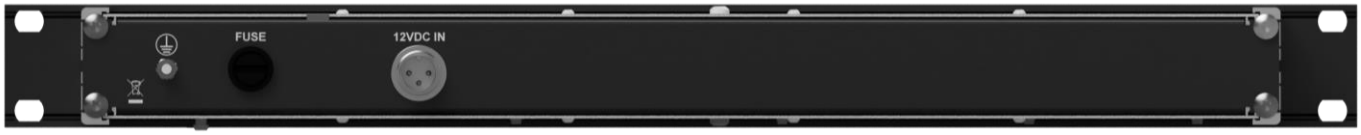
Mechanical Data

GPSoF4 (TX) L1+L2
Dimensions Outline Drawing: DOU-00398416

	Input	Output	Description	Interface	
	X		GPS In	SMA (female)	
		X	FO Out	FC/APC (Adapter)	
	X		12 VDC In	3pol connector plug	

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/