

VIAVI Micro-JLT

SOCXO 10 MHz GNSSO Extended Temperature

Typical Electrical Specifications

Module Specifications	
1 PPS Stability	<10 ns to UTC RMS (1-Sigma) GPS Locked
Serial Control	GNSS NMEA and Status Output, SCPI-99 control, RS-422 Port
GNSS Frequency, Antenna Power	GPS/Glonass/Galileo/BeiDou/QZSS 3.3 V antenna-power built-in
GNSS Receiver	72 Channels, Auto-Survey, Position-Hold Mode, and SBAS capable
Sensitivity	
Acquisition	-148 dBm
Tracking	-167 dBm
GNSS TTFF	
Cold Start	<29 sec
Warm Start	<2 sec
Hot Start	<2 sec
ADEV SOCXO (at 25.0°C, no airflow/motion/vibration, 5 days GPS locked)	
0.1 s	<3E-12
1 s	<6E-12
1K s	<9E-12
10K s	<4E-12
Holdover	<2 µs in 5 hours (at 25.0°C, no airflow/motion/vibration, 5 days GPS locked)
Warmup and Stabilization Time	<12 min at +25°C to <1E-09 Accuracy to GNSS
Supply Voltage (Vdd)	5.5 V +0.5 V/-0.3 V, 5.0 V optional



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Module Specifications continued		
Power Consumption	<2.6 W @25°C, <6 W during warmup (SOCXO)	
Operating Temperature	-40°C to +85°C	
1 PPS External Reference Input	Supports an optional external 1 PPS TTL/CMOS input	
10 MHz Output	+8.5 dBm ±0.5 dB	
1 PPS Output	OCXO flywheel generated, TTL	
Oscillator Specification		
Frequency Output	10 MHz Sine Wave	
10 MHz Retrace	<±1E-09 After 1 Hour @ +25°C (no GNSS)	
Frequency Stability (over Temperature, over 24 hours)	±6E-09, <1E-012 over 24hrs (with GNSS), ±2E-010 optional w/DOCXO	
Output Harmonics, spurs	<-50 dBc/Hz, <-125 dBc/Hz	
OCXO Aging (fully compensated by GNSS)	<±0.1 ppm per year without GNSS	
Phase Noise @ 10 MHz	1 Hz	-92 dBc/Hz
	10 Hz	-128 dBc/Hz
	100 Hz	-150 dBc/Hz
	1 kHz	-156 dBc/Hz
	10 kHz	-157 dBc/Hz
	100 kHz	<-162 dBc/Hz
Connections	Connector Type	
10 MHz Sine Wave Out, GNSS Antenna	SMA	
+5.5 V Power, 1 PPS output, RS-422 serial	2-pin Hirose, PN: DF11-12DP-2DSA(01)	
3-pin 100 mil through hole (optional)	1 PPS Input, ISP#	

NOTE: Specifications subject to change without notice.



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