

VIAVI

Micro-JLT

DOCXO Low-G GNSDO™ 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 DOCXO (at 25.0°C, no airflow/motion/vibration, 5 days GPS locked)	
0.1 s	<2E-12
1 s	<5E-12
1K s	<7E-12
10K s	<4E-12
Holdover	<2 µs in 24 hours (at 25.0°C, no airflow/motion/vibration, 5 days GPS locked)
Warmup and Stabilization Time	<12 min at +25°C to <5E-010 Accuracy to GNSS
Supply Voltage (Vdd)	5.0 V +0.5 V/-0.3 V, (5.5 V optional)
Power Consumption	<3.2 W @25°C, <7 W during warmup (DOCXO)



DOCXO Low-G GNSDO Extended Temperature

Module Specifications continued		
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, LVDS	
Oscillator Specification		
Frequency Output	10 MHz Sine Wave	
10 MHz Retrace	< ±5E-010 After 1 hour @ +25°C (no GNSS)	
Frequency Stability over Temperature, and over 24 hours	±2E-010, 5E-013 over 24 hours (with GNSS)	
Output Harmonics, spurs	<-50 dBc/Hz, <-125 dBc/Hz	
OCXO aging (fully compensated by GNSS)	< ±0.05 ppm per year without GNSS	
Phase Noise	1 Hz	-100 dBc/Hz
	10 Hz	-130 dBc/Hz
	100 Hz	-140 dBc/Hz
	1 kHz	-152 dBc/Hz
	10 kHz	-156 dBc/Hz
	100 kHz	-158 dBc/Hz
Connections	Connector Type	
10 MHz Sine Wave Out, GNSS Antenna	SMA	
+5 V Power, 1 PPS output, RS-422 serial	12-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.