

Micro-JLT™ DOCXO low-g GNSSDO™ Extended Temp, PN: 100336



- Three concurrent GNSS tracking
- Low-g crystal, DOCXO
- LVDS, RS-422 interfaces
- 1.5 x 3.0 x 0.9 Inches
- GPS, Galileo, Glonass, BeiDou
- PRELIMINARY SPECIFICATION

TYPICAL ELECTRICAL SPECIFICATIONS:

| Module Specification: | |
|--|--|
| 1 PPS Stability | <10ns 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 3.3V 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 | 0.1s < 2E-12, 1s < 5E-12, 1Ks < 7E-12, 10Ks < 4E-12 |
| Holdover at 25.0°C, no airflow, no motion/vibration, 5 days GPS locked | <2us in 24 hours |
| Warmup and Stabilization Time | <12 min at +25°C to <5E-010 Accuracy to GNSS |
| Supply Voltage (Vdd) | 5.0V +0.5V/-0.3V, (5.5V optional) |
| Power Consumption | <3.2W @25C, <7W during warmup (DOCXO) |
| Operating Temperature | -40°C to +85°C |
| 1PPS External Reference Input | Supports an optional external 1PPS TTL/CMOS input |
| 10MHz output | +8.5dBm ±0.5dB |
| 1PPS Output | OCXO flywheel generated, LVDS |
| Oscillator Specification: | |
| Frequency Output | 10MHz Sine Wave |
| 10MHz Retrace | <±5E-010 After 1 Hour @ +25°C (no GNSS) |
| Frequency Stability over Temperature, and over 24hrs | ±2E-010, 5E-013 over 24hrs (with GNSS) |
| Output Harmonics, spurs | <-50dBc/Hz, <-125dBc/Hz |
| OCXO aging (fully compensated by GNSS) | <±0.05ppm per year without GNSS |
| Phase Noise @ 10MHz | DOCXO |
| | 1Hz -100dBc/Hz |
| | 10Hz -130dBc/Hz |
| | 100Hz -140dBc/Hz |
| | 1kHz -152dBc/Hz |
| | 10kHz -156dBc/Hz |
| 100kHz -158dBc/Hz | |
| Connections: | |
| 10MHz Sine Wave Out, GNSS Antenna | Connector Type: SMA |
| +5V Power, 1PPS output, RS-422 serial | 12-pin Hirose, PN: DF11-12DP-2DSA(01) |
| 3-pin 100mil through hole (optional) | 1PPS Input, ISP# |

Micro-JLT GNSSDO™ Module

MADE IN USA



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