

NR4400-T-G

GPS Locked Reference Module with OCXO Holdover

KEY FEATURES



The signal source is a GPS driven, mixed-signal phase lock loop generating a 10MHz sine output from a temperature compensated voltage controlled crystal oscillator (TCXO). The output is a 0.4 Vrms sine. There is extensive built-in test that drives an LED and solid relay contacts for system integration. The unit also features an auto-calibration that compensates for long-term crystal drift provide years of precise performance. There is also a GPS lock status signal, PPS and serial port to provide access to NEMA time stamp data. To simplify use, there is only a single power supply voltage of 5 VDC (1 amp) required. All other required power voltages are developed internally.

Product Highlights

- Compact easily integrated
- Single 5 VDC supply
- Auto Calibration
- Built-in Test status signal
- GPS lock status signal

High Sensitivity GPS Receiver

26 channel high-sensitivity, high-accuracy Multi-GNSS receiver. Supports TRAIM, GPS, GLONASS, QZSS, SBAS, Active Anti-Jamming and Advanced Multipath Mitigation Functions.

Low Phase Noise- 10 MHz Sine

Phase Noise -NR4400-T	
Offset	dBc/Hz
1 Hz	-50
10 Hz	-100
100 Hz	-120
1 kHz	-130
10 KHz	-140

Company Datasheet #	NR-4400-T
Revision #:	A
Date:	8/8/16

Technical specifications

10MHz Sine	0.4 ±0.1 Vrms, 50 ohms- MCX- Option CMOS out
Harmonics	Less than -30dB
First Year Frequency Stability	± 1 ppm (long-term stability effectively cancelled by auto cal) @25 C
Temp Stability	±5 ppm
Accuracy-Auto cal (24 hrs)	10 MHz-<20ppb (does not include crystal drift if not GPS locked)
Receiver sensitivity	-155dBm
PPS	20ns RMS accuracy, 3.3 volt logic
GPS Lock	3.3 Vdc LVCMOS
Alert	3.3 Vdc LVCMOS
Power Requirements	5 (±0.2)Vdc @ 0.1 amps max
Connectors	MMCX 10 MHz output, sine wave
	MMCX PPS CMOS
	MMCX Antenna connector
	10 Pin 2 row 0.1 pitch
Options:	

Environmental and Mechanical

Operating temperature	0 to 50C non-condensing (extended temperature range available)
Storage temperature	-40 to 85C
Width	2 inch
Depth	2 inch
Height	0.6 in
Weight	~4 oz

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