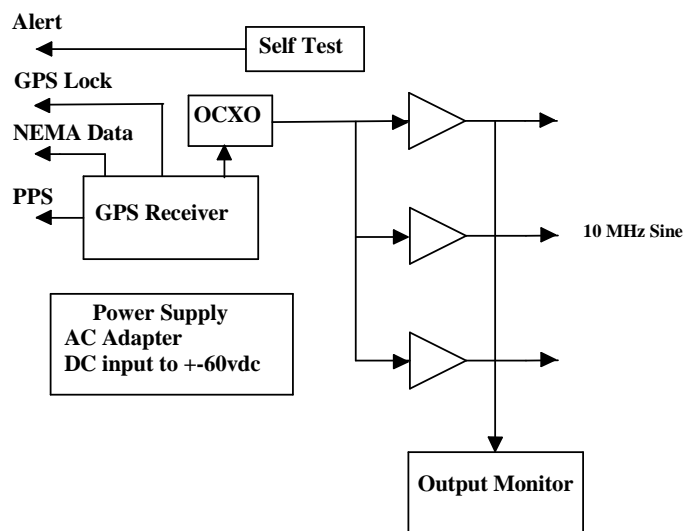


## NR3623-CAL

### 10MHz Frequency Reference, OCXO, GPS/GNSS Locked Triple Channel w/AutoCal

#### KEY FEATURES



The signal source is a GPS/GNSS driven, mixed-signal phase lock loop generating a 10 MHz sine output from an intrinsically low jitter, voltage controlled crystal oscillator. The outputs are a 1 Vrms sine. The unit also features AutoCal which continually monitors temperature and aging so that when the unit goes into holdover, the output frequency is at the last frequency value  $\pm 10$  ppb.

There is extensive built-in test that drives an LED and relay contacts for system integration. There is also a GPS/GNSS lock status signal (and LED), PPS and a serial port to provide access to NMEA time stamp data. The unit can operate from DC power from -60 VDC to +60 VDC in three ranges.

Power converter provides electrical isolation from the power source to the output (configuration option). The NR3623-CAL is available in a kit that includes the unit, antenna, power supply and cable to connect the antenna to the unit.

#### Product Highlights



#### High Sensitivity GPS Receiver

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

#### Typical Phase Noise 10 MHz Sine

Offset (Hz)	dBc/Hz
10	-110
100	-125
1K	-136
10K	-145

#### AutoCal

The unit stores the temperature/time performance of the holdover crystal multiple times per day. If GPS is lost, the unit uses the last best known compensation.

Company Datasheet #	NR3623-CAL
Revision #:	C
Date:	9/4/15

## Technical Specifications

10MHz sine	13 ±2 dBm ,50 Ohm - BNC	
Harmonics	less than -30 dBc	
Locked stability	<~E-11 after 100 seconds	
First year frequency stability	±50 ppb (long-term unlocked)	
Temp stability	±10 ppb	
GPS loss offset	±10 ppb	
Yearly aging	±30 ppb	
Receiver sensitivity	-155 dBm	
PPS	10ns RMS accuracy, 3.3 volt logic, output impedance CMOS (±20ma)	
Power requirements	Three ranges ± (9 to 18, 18 to 36, 36 to 65) VDC (AC adapter available) Power converter can be configured to provide > 500 volts isolation)	
Connectors	BNC - 10 MHz output	
	BNC - PPS 3.3 VDC CMOS	
	Power/Alert mate TE Connectivity- 106527-4	

## Environmental and Mechanical

Operating temperature	0 to 50C non-condensing (extended temperature range available)	
Storage temperature	-40 to 70C	
Width	5" (exclusive of connectors)	
Depth	6.4"	
Height	1.5"	
Weight	~16 oz	

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