

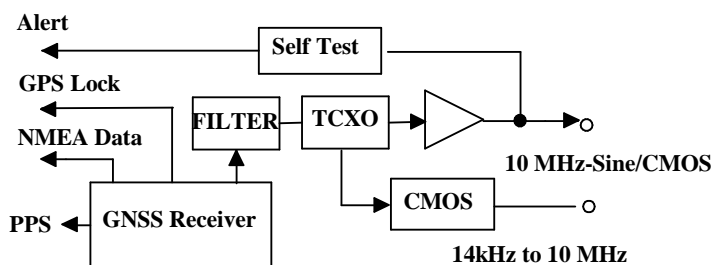
Company Datasheet #	NR6720-CAL-T
Revision #:	A
Date:	12-22-16

NR6720-CAL -T GPSDO



10 MHz GPS Locked 10 MHz Reference, TCXO based, Secondary Synthesized Channel

KEY FEATURES



Synthesizer

The signal source is a GNSS driven, mixed-signal phase lock loop generating a 10 MHz sine output from an intrinsically low jitter voltage-controlled crystal oscillator. The output is a 1 Vrms sine. The unit also features Auto Cal. The unit continually monitors temperature and aging so that when the unit goes into holdover, the output frequency is at the best known compensation. A secondary channel is available that synthesizes an output that can be anywhere from 14 KHz to 10 MHz This output is slaved to the primary 10 MHz channel. There is extensive built-in test that drives an LED and relay contacts for system integration. GPS lock status signal (and LED) a serial port to provide access to NMEA time stamp data.

Synthesized Secondary Channel

Secondary channel programmable from 14 KHz to 10 MHz-3.3 VDC CMOS

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 Frequency (Hz)	Typical (dBc / Hz)
10	-110
100	-125
1K	-130
10K	-140

Auto Cal

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

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Technical Specifications

10 MHz Sine	13 ±2 dBm ,50 Ohm - BNC
Harmonics	Less than -30 dBc
Locked Stability	<~E-11 after 100 seconds
First Year Frequency Stability	±1 ppm (long-term unlocked)
Temp Stability	±10 ppm
Secondary Channel	14 KHz to 10 MHz—factory set in 1 ppm steps 3.3 VDC LVCMOS Nominally ships at 10 MHz
Secondary Duty Cycle	45 to 55%
Receiver Sensitivity	-155dBm
PPS	30ns RMS accuracy, 3.3 volt logic, output impedance CMOS (±20ma)
Connectors	SMA 10 MHz output SMA secondary output SMA PPS 3.3 Vdc CMOS
Power Connector	2-pin Power Con- power in, Digikey 277-2416-ND mates with 277-2417-ND
Power	Available -60 to +60 Vdc in three ranges

Environmental and Mechanical

Operating Temperature	0 to 50C non-condensing (extended temperature range available)
Storage Temperature	-40 to 70C
Width	3.5 inches
Depth	5 inches (exclusive of Connectors)
Height	1.13 inches
Weight	~16 oz

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