

Company Datasheet #	NR2306-O-G
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# NR2306-O-G

## 10 MHz Six Channel GNSS Locked Ultra-Low Phase Noise



An ultra-low phase six channel reference that can be GNSS locked, locked to an external 10 MHz or an external PPS. A low noise OCXO is vibration isolated from the assembly to minimize mechanically induced phase noise. The unit may also be locked to a 1300 nm fiber optic port. Synthesized PPS features sub 1 ns jitter. All channels are faults and transient protected. Internal monitoring allows local channel amplitude via an LCD display or remote monitoring via an RS232 port or SNMP.

### Crystal

Excellent aging is achieved by using a low jitter overtone SC cut crystals in a temperature-controlled oven that is vibration isolated

### High Sensitivity GPS

The 26 channel GPS receiver is a high correlator design that can perform very rapid sky searches for satellite signals even under very poor signal conditions.

### Phase Noise



## Specifications

10MHz sine	4 ±0.5 dBm ,50 Ohm - BNC
Harmonics	Less than -30 dBc
First year frequency stability	±50 ppb (long-term unlocked)
Temperature stability	±10 ppb (long-term unlocked)
Yearly aging	±50ppb (long-term unlocked)
Phase noise	-85 @1 Hz
	-140@10 Hz
	-150 @100 Hz
	-160 @ 1000 Hz
PPS	15ns 1 sigma, 3.3 volt logic or 5Vdc
PPS Jitter	Stabilized < 1 ns pp
GNSS Receiver	26 Channel GNSS
Power requirements	< 10 watts , 90 to 250Vac , 50/60 Hz
Connectors	BNC 10MHz output
RS232	NMEA 0183 and equipment status
RJ45	SNMP V03
Optional NTP	V04

## Environmental and Mechanical

Operating temperature	0 to 50°C non-condensing
Storage temperature	-40 to 70°C
Height	1RU (~1.73")
Width	19 inches
Depth	13 inches
AC input	90 to 250 VAC, 50/60Hz, less than 10 watts

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