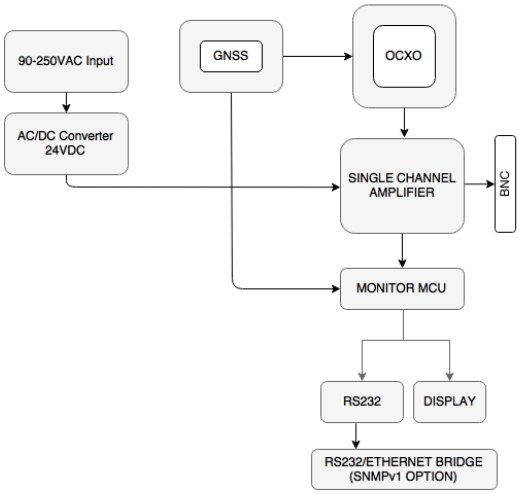
	Company Datasheet #	NR2110-O/G/P NTP
	Revision #:	C
	Date:	3-25-17

NR2110-O/G/P

10MHz Frequency Reference, GNSS Locked NTP and Dual Time Base

KEY FEATURES



Stratum 1 NTP timing source offers a fully redundant time base to detect and alert to an out of tolerance condition. Timing uncertainty detection as low as 100 ns detected and reported. High performance 26 channel GNSS receiver that supports GPS, GLONASS, SBAS, QZSS. RS232-NMEA and PPS. Oven controlled stability maintains accuracy to less than 5 ms/day during GNSS loss conditions. Redundant time base monitors primary time base and detects an out of tolerance state as low as 100 ns.

Product Highlights

- Stratum 1
- AutoCalibration
- Built-in test status signal
- Serial Internet
- Local display and control
- NTP Time server

High Sensitivity GNSS Receiver

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

Typical Phase Noise 10 MHz Sine

Offset (Hz)	dBc/Hz
10	-110
100	-125
1K	-136
10K	-140

Technical Specifications

10MHz sine	1.0 Vrms, 50 Ohm – BNC	
Harmonics	less than -30dB	
First year frequency stability	± 50 ppb (long-term stability effectively cancelled by AutoCal)	
Temp stability	± 10 ppb (unlocked)	
Daily aging OCXO	± 5 ppb/day	
Accuracy – AutoCal (24 hrs.)	10 MHz<15 ppb (does not include crystal drift if not GNSS locked)	
NTP server option	V03 Stratum 1	
Network Interface	10/100 BaseT with RJ-45 connector	
Power requirements	90 to 264 VAC, 50/60Hz	
Antenna	SMA 3.3VDC antenna power (<40 mA)	
Serial port option	RS232 or Internet – (DB9/RJ45) - optional	
Dual time base option	Secondary GNSS driven monitor	

Environmental and Mechanical

Operating temperature	0 to 50°C non-condensing (extended temperature range available)	
Storage temperature	-40 to 85°C	
Height	1.73” (1 RU)	
Width	19.0”	
Depth	10.0”	
Weight	~5 lbs.	