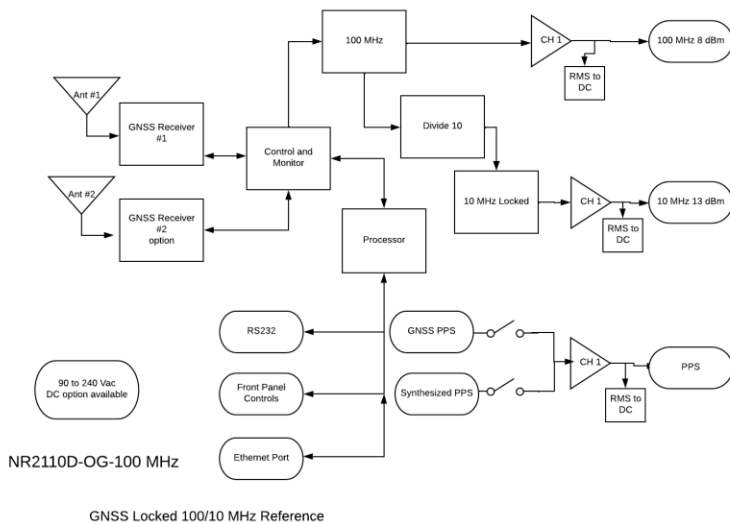


Company Datasheet #	NR2110D-O-G-100
Revision #:	A
Date:	080824

NR2110D-O-G

100MHz GNSS Locked Reference with Networking/options



Networking

SNMP

Phase Noise

Three Performance levels

All channels are monitored for a fault condition and built in test monitors critical circuits which drives panel indicators as well as alarm relay that can be wired into an alarm panel. Dual time base option independently monitors frequency.

Technical Specifications

Environmental and Mechanical

100 MHz Sine	8 dBm 50 ohm- BNC-
Harmonics	Less than -30dB
First Year Frequency Stability	± 50 ppb (unlocked)
Temp Stability	±10 ppb (unlocked)
Daily Aging OCXO	±5 ppb/day (unlocked)
Yearly aging	±30ppb (unlocked)
Phase Noise	
Three different options for phase performance is available.	Phase Noise dBc/Hz
	Offset A B C
	10 -95 -90 -85
	100 -122 -120 -115
	1k -150 -140 -135
	10k -160 -155 -145
100k -162 -155 -145	
Accuracy	±5E-10
PPS	
Amplitude for 1PPS	3.3 Vdc CMOS (5 Vdc option)
Pulse width for 1PPS	Programmable 1 to 500ms in 1 ms steps
Rise time for 1PPS	<2 ns (faster edge available)
Connector	SMA
Load Impedance	50 Ohm
Location	rear
Remote interface & control	
Protocol	RS232 NMEA-0183
Connector	DB-9
Location	Rear panel
Protocol	Bit plus stop
Standard Baud Rates	Selectable 4800, 9600, 19200, 38400, 57600 or 115200 bps
Connectivity	Ethernet: 10/100M RJ-45
SNMP	v2
GNSS receiver	GPS L1 C/A, GLONASS L1OF, QZSS L1 C/A, SBAS L1 C/A (Ready): Galileo E1B/E1C, QZSS L1S
Channels	26 channels (GPS, GLONASS, QZSS, SBAS)
Sensitivity	



Company Datasheet #	NR2110D-O-G-100
Revision #:	A
Date:	080824

GPS	Tracking: -161 dBm
	Hot Start: -161 dBm
	Warm Start: -147 dBm
	Cold Start: -147 dBm
	Reacquisition: -161 dBm
GLONASS	
	Tracking: -157 dBm
	Hot Start: -157 dBm
	Warm Start: -143 dBm
	Cold Start: -143 dBm
	Reacquisition: -157 dBm
	With Novus recommended antenna
Recommended Antenna with LNA	
Antenna power	3.5 Vdc, < 35 ma (on center conductor) (factory configurable to 5 Vdc)
Frequency	1574-1607 MHz
Nominal Gain	2 dBic
Amplifier gain	26 dB
Noise Figure	< 2.0 dB
Out of Band rejection	Fo±50MHz=60 dBc, Fo±60 MHz
DC current	<25 ma@3.5 Vdc
Accuracy-Auto cal (24 hrs)	<2E-11
Alert	Status indicator and relay contacts via rear panel BNC
Power Requirements	90 to 264 VAC, 50/60hz

Operating temperature	0 to 50C non-condensing
Storage temperature	-40 to 70C
Height	1RU (~1.73)
Width	19 inch
Depth	12 inch
AC input	90 to 250 VAC, 50/60hz, less than 10 watts
Weight	≈5.5lbs

This document is copyright © January 1, 2025 Novus Power Products LLC. All rights reserved. This document is provided for information purposes only; contents are subject to change without notice. It is not warranted to be error-free, nor subject to any other warranties or conditions including implied warranties and conditions of merchantability or fitness for a particular purpose.