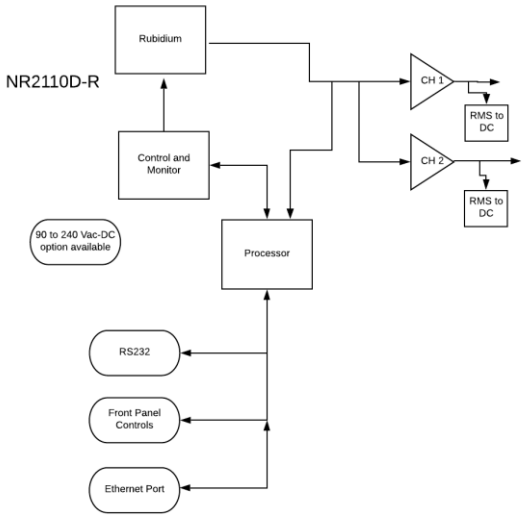
Company Datasheet #	NR2110DR
Revision #:	B
Date:	041922

NR2110D-R

10MHz, Dual Channel, Rubidium Reference with Networking Capability



Dual Channel 10 MHz Rubidium Reference

Networking

SNMP option

Phase Noise

Offset Frequency (Hz)	Typical (dBc / Hz)
10	-85
100	-115
1K	-135
10k	-140

High Performance reference featuring the low phase noise of an OCXO, holdover performance of Rubidium and long-term stability of GNSS locking. Networking affords remote control and monitoring via SNMP.

Technical Specifications

Output	10 MHz,0.5 Vrms ±0.1, into 50 Ohms, 10 channels, Sine	
Harmonic Distortion	< -30 dBc	
Connectors	BNC	
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	
SNMP (option)		
Remote monitoring & control	Internet	
Parameters monitored Locally – present on remote interface for monitoring	Output amplitude, all power supplies, GNSS lock status, number of satellites, Built-In test status,	
Transaction/decodable commands	English format	
Single monitoring command	Updated every second	
Connector	RJ-45	
Rubidium Atomic		
Accuracy at shipment	+/-5.0E-11	
Warm-up time	<15 minutes	
Time of lock	<5 min -130 dBm	
Time to achieve accuracy	<±1E-9<20 minutes	
Aging - monthly	<±5E-11	
Retrace	<±1.0E-10 after 1 Hour	
Stability: Allan Deviation		
1s	<3E-10	
10s	<1E-10	
100s	<3E-11	
SSB Phase noise for 10Mhz		
	Standard	
10Hz	<-85dBc	
100Hz	<115dBc	
1000Hz	<-135dBc	
10000Hz	<-140dBc	

Environmental and Mechanical

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 (DC power options available)
Weight	≈5.5lbs