

DATA SHEET NUMBER	NR3606-O
REVISION	B
DATE	2-11-22

# NR3606-O

## Eight Channel OCXO Reference

### 3 PPS and 3 Sine Plus LVDS



Unique in the industry, the NR3606 provides three 10 MHz sine outputs and three synthesized PPS outputs. It also provides a 10 MHz LVDS and PPS LVDS output. Ideally suited for applications requiring the stability of a OCXO frequency reference and the synchronization of a PPS but are operating in a GNSS denied environment. 1PPS synthesizer is factory programmable to other frequencies and pulse widths.

The OCXO provides low phase noise and a holdover stability of 5 ppb/day.

The PPS outputs can be factory configured to either 3.3 or 5.0 Volt CMOS levels capable of driving a 50 Ohm load.

### OCXO Holdover

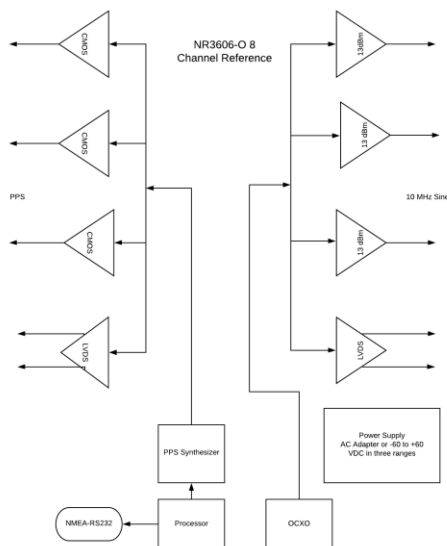
Aging < +/-5 ppb/day

### LVDS

Three sine and three PPS plus a 10 MHz LVDS and PPS LVDS

### Low Phase Noise

Phase Noise	
Offset	dBc/Hz
1	-75
10	-115
100	-140
1K	-145
10k	-145



DATA SHEET NUMBER	NR3606-O
REVISION	B
DATE	2-11-22

<b>Output</b>	10 MHz, 0.5 Vrms $\pm 0.2$ , into 50 Ohms, LVDS 100 Ohms load
Accuracy at shipment	$< \pm 1E-9$
Harmonics	Less than -30 dBc
First year frequency stability	$\pm 50$ ppb (long-term unlocked)
Temperature stability	$\pm 10$ ppb (long-term unlocked)
Yearly aging	$\pm 50$ ppb (long-term unlocked)
Power requirements	Standard configuration is 12VDC (9 to 15VDC) Options- $\pm 24$ VDC (20 to 30VDC), $\pm 48$ VDC (40 to 60VDC) AC adapter available 100 to 240VAC, 50/60Hz
Connectors	BNC 10 MHz output BNC 10 MHz input BNC PPS (3.3 VDC CMOS) (assigned when ordered)
LVDS outputs	On Shore tech OSTOQ033251 mates with Digikey ED2876-ND
<b>PPS</b>	
Amplitude for 1PPS	3.3 VDC CMOS (5 VDC option)
Pulse width for 1PPS	100ms
Rise time for 1PPS	$< 5$ ns
Connector	BNC
Load Impedance	50 Ohm
Location	rear
Other	Port is factory programmable to other pulse frequencies.
LVDS	100 Ohm load
<b>Remote interface &amp; control</b>	
Protocol	RS232
Connector	DB-9
Location	Rear panel
Protocol	Bit plus stop
Standard Baud Rates	Selectable 4800, 9600, 19200, 38400, 57600 or 115200 bps
<b>Main Power</b>	
DC input	-60 to +60 in three ranges
Power	$< 15$ W ( steady state $< 10$ W)
<b>Warranty</b>	1 year plus 3 year optional extended warranty from date of shipment

### ***Environmental and Mechanical***

Operating temperature	0 to 50°C non-condensing
-----------------------	--------------------------



<b>DATA SHEET NUMBER</b>	NR3606-O
<b>REVISION</b>	B
<b>DATE</b>	2-11-22

Storage temperature	-40 to 70°C
Height	1.58"
Width	6.0"
Depth	6.0 " exclusive of connectors
Weight	1.5 lbs.

This document is copyright © February 11, 2022 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.