

NR7000-O *pico*POD

10 MHz Reference with Synthesized PPS

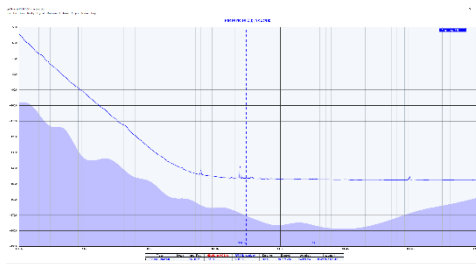


The NR7000-O *pico*POD is a high-performance reference in an ultra-compact package that affords simple system integration.

Can be locked to an external PPS.

The *pico*POD is just 2"x2"x0.9" and requires only a 5 Vdc source. Outputs are a 8 dBm sinewave or LVCMOS 10 MHz output. PPS synthesized from the OCXO at 3.3 Vdc.

Low phase noise at -150dBc/Hz@1000Hz provides a holdover stability of ± 100 ppb/year.



Low Power Consumption

Steady state power < 2 W. With a single 5V input

Synthesized PPS

PPS synthesized from the 10 MHz. Programmable pulse width. Secondary synthesized channel factory programmable from sub 1 Hz to 25 MHz.

Programmable Secondary Channel

Optional secondary synthesized channel factory programmable from sub 1 Hz to 25 MHz.

Technical Specifications

10 MHz sine	8 ±2 dBm ,50 Ohm - SMA
g-Sensitivity	< .07 ppb/g
First year frequency stability	±100 ppb
Temperature stability	±300 ppb (10 MHz)
Phase Noise dBc/Hz	
10 MHz	
10 Hz	-115
100 Hz	-130
1 kHz	-140
10 kHz	-150
50 MHz	
10 Hz	-90
100 Hz	-115
1 kHz	-140
10 kHz	-145
100 MHz	
10 Hz	-80
100 Hz	-110
1 kHz	-140
10 kHz	-145
PPS-OUT	
Amplitude for 1PPS	3.3 Vdc CMOS (5 Vdc option) 500 Ohms
Pulse width for 1PPS	Programmable 1 to 500ms in 1 ms steps
Rise time for 1PPS	<2ns
Connector	10 Pin 0.1" (Samtec IPL1-105-01-L-D-RA-K)
Load Impedance	500 Ohm
Location	Side Connector
PPS-IN	
	Located on the ten pin connector
Input impedance	1 kOhm
Amplitude	3.3 volt CMOS
Remote interface & control	
Protocol	RS232 NMEA-0183
Connector	Side connector
Location	side panel
Protocol	8 Bit plus stop
Standard Baud Rates	Selectable: 9600, 19200, 38400, 57600 or 115200 bps
Secondary Channel	
	Derived from 200 MHz master oscillator locked to 10 MHz. Sub 1 Hz to 25 MHz
	Contact factory for valid synthesis values

	Output impedance is 200 Ohm.	
Power	5 -0.1,+0.5 VDC Peak power < 3 watts, steady state < 2 watts	
Power connector	On ten pin connector	
Mounting	4 -#4-40 threaded mounting holes	
Chassis	Aluminium chassis	

Environmental and Mechanical

Operating temperature	-20 to 50°C non-condensing (extended temperature range available)	
Storage temperature	-40 to 70°C	
Width	2"	
Depth	2" (exclusive of connectors)	
Height	0.9 (50,100 MHz 1.1) inches	
Weight	<3 oz	

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