

NR7000-NP *pico*POD

NMEA and PPS source



The NR7000-NP *pico*POD is a high-performance source for NMEA and PPS when a reference is not required in an ultra-compact package that affords simple system integration.

The *pico*POD is just 2"x2"x0.9" and requires only a 5 Vdc source. Outputs are PPS at 3.3 Vdc, and NMEA at LVCMOS or RS232 levels.

Low Power Consumption

Steady state power < 0.6W. With a single 5V input,

Programmable PPS

Pulse width of the PPS is field programmable via the rs232 port in 1 ms increments.

26 Channel GNSS Receiver

26 channels (GPS, GLONASS, QZSS, SBAS)

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Technical Specifications

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	<5ns
Connector	sma
Load Impedance	500 Ohm
Location	Side Connector
Remote interface & control	
Protocol	RS232 NMEA-0183
Connector	sma
Location	side panel
Protocol	Bit plus stop
Standard Baud Rates	Selectable: 9600, 19200, 38400, 57600 or 115200 bps
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	
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
Antenna with LNA	

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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
Power	5 to 6 VDC Peak power < 3 watts, steady state < 2 watts
Power connector	On ten pin connector
Mounting	4 -#2-56 threaded mounting holes
Chassis	Aluminum

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"
Weight	<3 oz

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