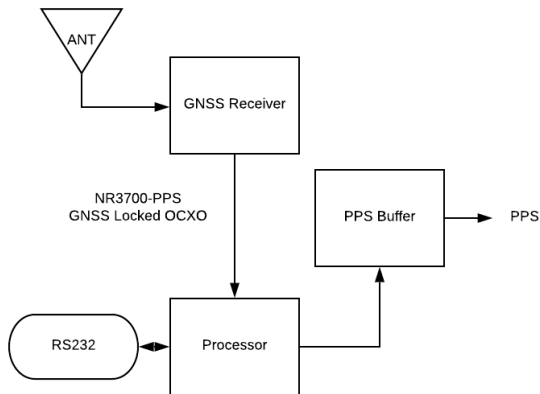


Company Datasheet #	NR3700-PPS
Revision #:	B
Date:	2/15/15

NR3700-PPS

PPS-NMEA Source with TCXO Holdover

KEY FEATURES



The NR6720-PPS generates a PPS pulse that originates from a 26 channel GNSS receiver. That pulse is then processed and is output through a high current buffer allowing the driving of a 50 Ohm load. The output voltage levels can be factory set to 3.3 or 5 Vdc CMOS. The PPS pulse width can be set in 1 usec increments to 500ms.

NMEA and control take place on the RS232 port that can be programmed to broad range of baudrates.

Unit can be operated in one of three ranges from -60 to +60 VDC or a AC power adapter sold as an accessory.

Built-in-test that drives an LED and relay contacts for system integration.

Product Highlights



Programable Pulse Width

Programmable to 500ms in 1 usec steps.

Operates from -60 to +60 Vdc

Three ranges or an AC power adapter

PPS drives 50 Ohm loads

Programmable to 500ms in 1 usec steps.

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Technical specifications

Output	1 Hz, 5 or 3.3 Volt CMOS Levels into 50 Ohms
Accuracy	15 ns @1 σ -130dBm, 50 ns 1 σ @-150dBm
Pulse width	Programmable to 500ms in 1 usec steps
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
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	
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 \pm 50MHz=60 dBc, Fo \pm 60 MHz
DC current	<25 ma@3.5 Vdc
Connectors	SMA 10 MHz output SMA secondary output SMA PPS 3.3 Vdc CMOS 3 pin LVDS connector, +, -, gnd , mates with ON Shore OSTTJ0311530

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Power requirements	Standard configuration is 12 VDC (9 to 15 VDC) Options- ± 24 VDC (20 to 30 VDC), ± 48 VDC (40 to 60 VDC) AC Adapter available 100 to 240VAC, 50/60Hz Power 3W normal operating Power isolation exceeds 200 VAC
Connectors	4-pin power con - power in, status relay connector- Digikey 277-2418-ND (mate provided with unit) For AC adapter use: the adapter comes with a threaded connector

Environmental and Mechanical

Operating temperature	0 to 50C non-condensing (extended temperature range available)
Storage temperature	-40 to 70C
Width	3.5" (with flange)
Depth	4" (exclusive of connectors)
Height	1.2"
Weight	~8 oz

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