

BYONICS GPS5

GPS Receiver

www.byonics.com/gps

The Byonics GPS5 is a 3.3 volt to 5.5 volt mouse-type GPS receiver that will send RS-232 compatible NMEA v3.00 sentences (GGA, GSA, GSV, RMC) at 4800 baud N81 once per second. It is directly compatible with the Byonics TinyTrak3Plus, TinyTrak4, and Micro-Trak RTG. It has a blue internal LED that is on solid when acquiring, and flashing when synchronized. It also has an internal magnet for mounting to ferrous metal, is IPX7 waterproof, and has an internal battery for rapid position fix.

WARNING: Do not connect this GPS to a voltage higher than 5.5 volts or the unit will be damaged.

Interface

DB-9F pin	Function
2	RS-232 Out (+/- 8V RS-232 NMEA data from GPS)
3	RS-232 In (not normally used)
4	Vcc (3.3V – 5.5V)
5	Ground

Sample output

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$GPGGA,181812.000,3313.8978,N,11147.6274,W,1,09,1.1,383.8,M,-26.7,M,,0000*63
$GPGSA,M,3,30,28,07,17,11,13,01,04,19,,,,,1.9,1.1,1.6*36
$GPGSV,3,1,11,30,73,039,31,28,60,316,28,07,50,103,33,17,37,202,31*76
$GPGSV,3,2,11,11,34,085,29,13,33,307,30,01,22,103,27,04,18,075,28*7F
$GPGSV,3,3,11,19,12,039,39,26,44,299,,08,40,321,*48
$GPRMC,181812.000,A,3313.8978,N,11147.6274,W,0.00,335.91,010715,,,A*79
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Specifications

Size	42mm x 36mm x 15mm
GPS IC	SiRFstarIV
Receiver	48 channel, GPS/QZSS: L1 1575.42MHz
SBAS Support	WAAS, EGNOS, MSAS, GAGAN
Accuracy	Position: <2.5m Velocity: <0.01 m/s speed, <0.01° heading
Acquisition Time	Cold Start: <35 sec (Average) Warm Start: <35 sec (Average) Hot Start: <1 sec
Sensitivity	Acquisition: -147dBm Tracking: -163dBm
Dynamics	Altitude: 18km (Max) Velocity: 1852km/hr (Max) Acceleration: +/- 4g (Max)
Power Supply	DC 3.3V – 5.5V
Power Consumption	32mA average
Operating Temp	-20C - +60C
Antenna Type	Built-in Patch antenna
Cable Length	2 meters

Feel free to email any questions or comments at <http://www.byonics.com/contact>