

iWave GPS Module delivers high sensitivity and accuracy with low power consumption. Based on SiRF StarIII chipset, it has the ability to capture weak satellite signals even in urban settings, canyon and thick foliage. 20 channel GPS receiver enables fast acquisition and reacquisition. GPS module design is flexible to accommodate various RF interference scenarios. Fine components and in-house design expertise offer superior quality and support. Small form factor helps you to create cutting edge compact devices for Personal Navigation, fleet management, asset tracking, personal tracking, surveying, security and other navigation devices.

Specification

Chipset: SiRF StarIII GSC3f/LPx

Channels: 20 channel receiver, L1 Frequency

Tracking Sensitivity: -159 dBm

Accuracy:Autonomous:<10m

Time to First fix:

- ◆ Reacquisition: 1.0 sec
- ◆ Hot Start: < 2 sec average
- ◆ Cold Start: < 41 sec average

Dynamic Condition

- ◆ Altitude: 18,000 meter
- ◆ Velocity: 514 meter/sec maximum
- ◆ Max.Update Rate: 1 Hz / 5Hz*

Protocol: NMEA

Output Protocol message: GGA, GSA, GSV, RMC, GLL, VTG

Baud Rate: 4800* / 9600 bps

Operating Voltage: 3.3V

Power Consumption: <111.5mW

Backup Power: 3V

Antenna Interface: SMA connector or U.FL Connector*

Operating/Storage temperature: -25 deg. C to +80 deg.C/ -25 deg. C to +85 deg.C

IO connector (6 Pin): UART Interface, 3.3V Power Input, Back-up battery power Input(optional)

Dimensions:

- ◆ Length : 28.18mm +/- 0.2mm
- ◆ Width (With IO Connector): 24.24mm +/- 0.2mm(24.8mm +/- 0.2mm)
- ◆ Height (With SMA Connector): 8.35mm +/- 0.2mm (14.9mm +/- 0.2mm)
- ◆ Weight: <20 gms

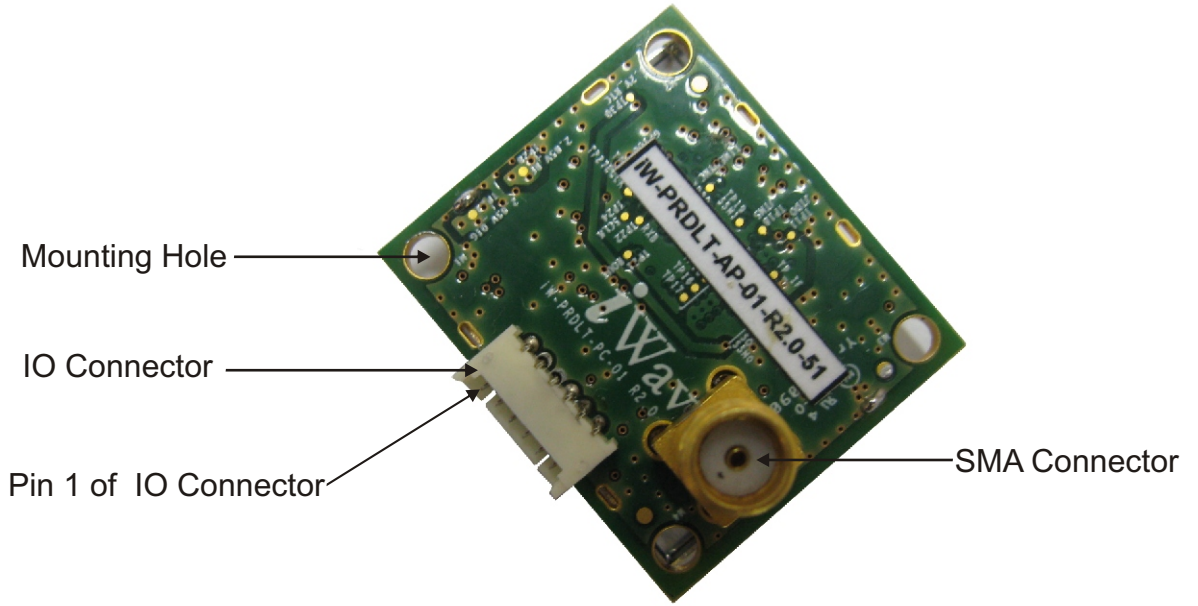
* **Contact iWave Marketing for more information**

** **For More information on Mechanical details or any other aspect please contact iWave Marketing**



About Us

iWave Systems Technologies is an embedded Hardware and Software Turnkey Design Services company, focused on providing integrated solutions for developing innovative products and systems in the areas of Communication, Consumer electronics and Multimedia. iWave offers complete turnkey solutions for systems engineering and product development.



iWave GPS module IO Connector

The pin details are provided in the table given below.

Pin No.	Pin Name	Description	Electrical Characteristics
1	VBCKP	RTC Backup Battery Input	Nominal: DC 3.0 V, Range: DC 2.5V to 3.6V Max.
2	3.3V Main	Main power supply for the module	Nominal: DC 3.3 V, Range: DC 3.1V to 3.6V Max.
3	Ground	Ground	Reference Ground (DC -ve)
4	TXA	Transmit pin of the module	2.85V Interface
5	RXA	Receive pin of the module	2.85V Interface (3.3V Tolerant)
6	GPIO	GPIO Line	No Connection

Antenna interface details to iWave GPS module

Only Active Antenna support is provided, 2.85V is provided to Antenna connector. Gain of the Antenna recommended is approximately 28 +/- 2 dB. SMA connector is used to interface external Active antenna to iWave GPS Module. Option to connect Active Patch Antenna is provided through U.FL connector

Test jig setup with RS232 or RS485 or USB is available for the above module. Customer can evaluate iWave GPS Module using these Test jig setup

Contact Us

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