

**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-7989

**Channels:** 20 channel receiver, L1 Frequency

**Chip Sensitivity:** -159 dBm

**Autonomous:** 10 meter

**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/second 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 Type:** On-board antenna

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

**IO connector (7 Pin):** UART Interface, 3.3V Power Input, Back-up battery power Input(optional), ON/OFF

**Dimensions:**

- ◆ Length (With IO Connector): 27mm +0.4mm(29mm +0.2mm)
- ◆ Width: 23 mm +0.4mm
- ◆ Height: 9 mm+/-0.2mm
- ◆ Weight: <25 grams

\* **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.



The pin details are provided in the table given below

Pin No.	Pin Name	Description	Electrical Characteristics
1	ON_OFF	Edge triggered soft ON or OFF request. (Input). (Leave unconnected if not used)	1.2V Interface ( <b>3.3V Tolerant</b> ) VIH: 0.84V(min) to 1.5V(max) VIL: -0.3V(min) to 0.36V(max)
2	Flash_Sel	Program mode select (Input) Pull-up for programming mode <b>(Leave Unconnected)</b>	<b>2.85V Interface</b> VIH: 2V(min) to 3.15V(max) VIL: -0.3V(min) to 0.8V(max)
3	RXA	Receive pin of the module (Input)	2.85V Interface ( <b>3.3V Tolerant</b> ) VIH: 2V(min) to 3.15V(max) VIL: -0.3V(min) to 0.8V(max)
4	TXA	Transmit pin of the module (Output)	<b>2.85V Interface</b> VOH: 2.65V(min) VOL: 0.2V(max)
5	Ground	Ground	Reference Ground (DC -ve)
6	3.3V Main	Main power supply for the module	Nominal: DC 3.3 V Range: DC 3.1V to 3.6V Max.
7	V_BKUP	RTC Backup Battery Input (Input) (Leave Unconnected if not used)	Nominal: DC 3.3 V Range: DC 2.5V to 3.6V Max.

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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