

GPS Engine Board

EB-807

EB-807 is a complete GPS sub-system of **16x22x5.8mm** in size. It has integrated patch antenna and 6 pins FPC connector interface.

It provides superior navigation performance under dynamic conditions in areas with limited sky view like urban canyons.

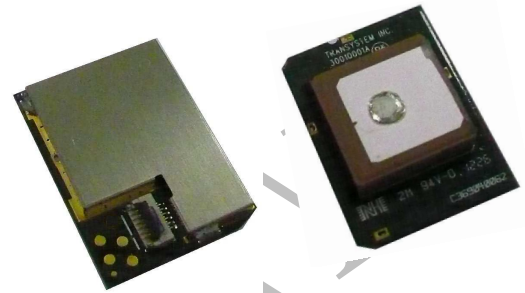
EB-807 has high receiving sensitivity up to **-165dBm** for weak signal operation without compromising accuracy.

Key Features :

- Small form factor: 16x22x5.8 mm
- Integrated 12x12x3.5 mm patch antenna
- 6 pin FPC connector
- Lead-Free – RoHS/WEEE compliant
- High sensitivity -165dBm
- Tracks 66-Channel of satellites
- Support QZSS and SBAS
- WAAS/EGNOS/MSAS/GAGAN supported
- RTCM ready
- AlwaysLocate™ location awareness technology
- EPO™ / HotStill™ orbit prediction
- EASY™ self-generated orbit prediction
- Fast Position Fix
- Ultra low power consumption
- FCC E911 compliance and A-GPS support

Applications :

- Automotive and Marine Navigation / Tracking
- Emergency Locator
- Geographic Surveying
- Personal Positioning
- Sporting and Recreation



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Ultimate

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Specifications

<i>Item</i>	<i>Description</i>
General	L1 frequency, C/A code (SPS) 66 independent tracking channels
Sensitivity*	-165dBm /Tracking; -148dBm /Acquisition
Update Rate	Up to 10Hz
Accuracy	<3m CEP (50%) without SA 2.5m DGPS (WAAS, EGNOS, MSAS, RTCM)
Acquisition (open sky)	Cold Start: < 35sec Warm Start: < 34sec Hot Start: < 1.5sec
Reacquisition	< 1sec
Dynamics	Altitude: 18000m (max.) Velocity: 515m/sec (max.) Vibration: 4G (max.)
NMEA	NMEA0183 v3.1 GGA, GSA, GSV, RMC (Default) / GLL, VTG (Optional)
Datum	WGS-84
Antenna	Integrated 12x12x3.5 mm patch antenna
Power Supply	DC 2.8V ~ 4.3V
Current	<20mA @ 3.3V / Tracking
Interface	UART, Baud rate : 4800/9600(Default)/.../115200
Connector	6 pin FPC connector, 0.5 pitch
Dimension	16x22x5.8
Operating Temp.	-40°C to 85°C
Storage Temp.	-40°C to 85°C
Operating Humidity	≤ 95%, non condensing

* Refer to chip specification.

** Specifications subject to change without prior notice.

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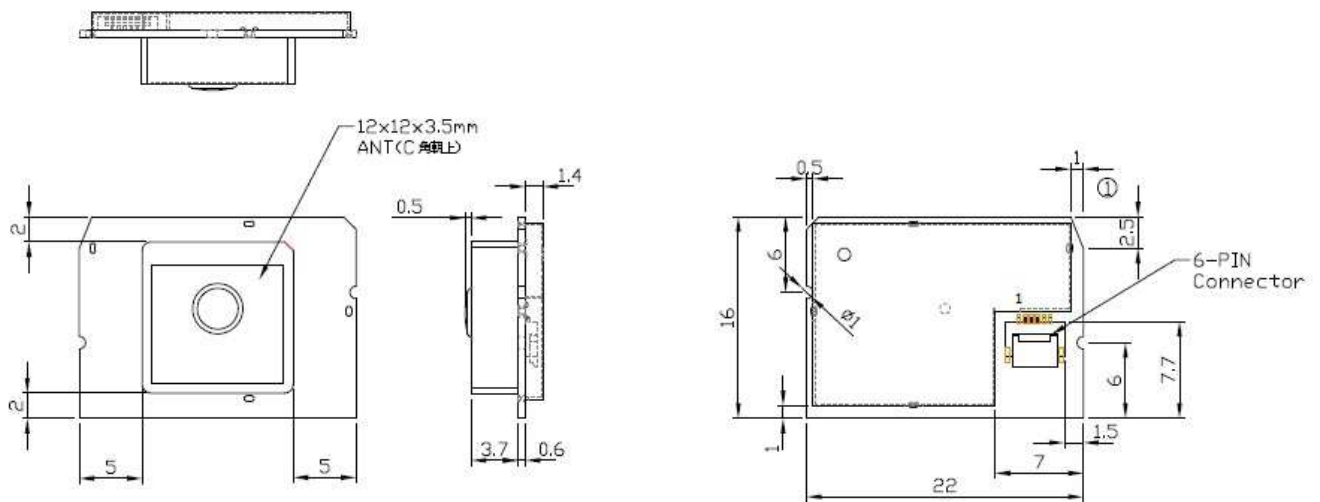
EB-807 Catalog

Pin Definition

Pin # FPC	Name	Type	Description
1	NC	-	NC
2	VRTC	P	Backup power 2.0~4.3Vdc
3	VCC	P	VCC 3.0V~4.2Vdc
4	RX	I	UART input to EB-807
5	TX	O	UART output from EB-807
6	GND	P	GND

P: Power I: Input O: Output I/O*: Input or Output, Open if not used

Mechanical Dimensions



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