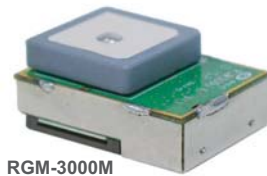


RGM 3000

Embedded GPS Receiver and Antenna Combination Modules



RGM-3000M



RGM-3000E

Features

- Compact size
- Twelve parallel channels
- Built-in patch antenna
- High sensitivity to satellite signal
- Low power consumption

The RGM-3000 is a compact size GPS receiver with patch antenna. The GPS receiver is powered by SiRF Star II technology and RoyalTek proprietary navigation algorithm that provide stable navigation data. The RGM-3000 has excellent power management features such as TricklePower. Great performance is achieved by excellent sensitivity allowing use of the RGM-3000 even in the urban canyon or foliage.

Embedded Applications

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

General

- 12 Channels
- L1 1575.42 MHz
- C/A code 1.023MHz chip rate

Acquisition time

- Reacquisition 0.1 sec., average
- Snap start 3 sec., average
- Hot start 8 sec., average
- Warm start 38 sec., average
- Cold start 48 sec., average

Accuracy

- Position 10 m 90% without SA
- Velocity 0.1 m/s, without SA

WAAS

- Supports WAAS

Dynamic conditions

- Altitude 18,000 meters max
- Velocity 515 m/s max
- Acceleration 4g, max
- Jerk 20 m/s³ max

Datum

- WGS-84

Power

- Voltage: 3.3V ± 10%.
- Current: 170mA max:

Protocol

- NMEA 2.2 GGA, GSA, GSV and RMC
Baud rate 4800 bps

Update rate

- 1Hz

Specifications:

- Storage temp: -50°C to +100°C
- Operating temp: -40°C to +85°C
- Humidity ≤ 95% non-condensing

Mechanical

- Size 21mm x 28mm x 12.75mm
- Weight 30g

Ordering Information

Part Number	Description
➤ RGM-3000M	➤ 12-channel receiver/antenna (compact size), flex cable connection, integrated unit
➤ RGM-3000E	➤ 12-channel receiver/antenna (compact size), flex cable connection, two board solution



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