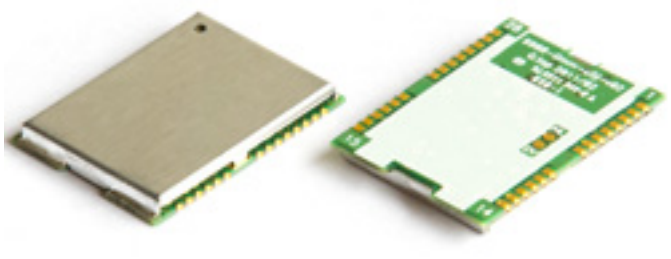
Module Features Advanced GPS Jammer Detection and Report System



GlobalTop Technology Inc. today expands the u5 family series with the introduction of the Gmm-u5j, a unique standalone GPS module featuring Anti-J.A.C.K.™, or Anti-**J**amming **A**ssessment **C**ommand Feedbac**k**, for critical asset protection and security.

Even though GPS is depended by millions worldwide for its positioning and timing capabilities, GPS signals, after traveling through 20,000 kilometers of unpredictable atmosphere, are weak and prone to be interrupted by the simplest GPS jammer. With the rapid increase in the availability of low-cost, highly illegal GPS jamming devices, there exists a major security hole that compromises the safety of traceable assets or fleet workers. Insurance companies around the world have reported a significant drop (up to 20%) in stolen vehicle recovery due to the use of GPS jammers.

Anti-JACK:

Anti-JACK is a powerful, easy to use GPS jammer detection and notification system designed to enhance security with double-layer of protections. Anti-JACK is able to alert the security system embedded with Gmm-u5j GPS receiver on nearby GPS jammers through its customized NMEA protocol, or via direct voltage level with dedicated hardware pin out. System integrators can transmit the protocol to a cellular radio of his choice to remotely alert users, or have it connect to a physical alarm or siren that blast out loud when the system is tempered with.

Using its special circuitry, Anti-JACK is able to provide two levels of jamming

sensitivity that can automatically adapt to different antenna setup (active or passive antenna). A total of 4 different GPS jammer detection mode is offered, including a smart power saving mode that reduces power consumption used by jammer detection when the GPS signal reception is above acceptable. Last but not least, all Anti-JACK settings can be easily toggled with simple packet commands.

Antenna Advisor:

In addition, Gmm-u5j comes with “Antenna Advisor”, a smart antenna system that enables the GPS module to detect and notify external active antenna connection. It also features antenna short circuit protection to safeguard the module from being damaged by short circuiting at the external antenna I/O end. Antenna Advisor is very easy to implement and requires only a single additional resistor.

Application and Availability:

With its easy-to-use jamming detection and comprehensive software customization such as last position retention and geo-fencing, Gmm-u5j is targeted towards high value, high risk fleet management and GPS tracking devices used in sectors like sub-prime vehicles loan, agricultural tractors, and construction vehicles.

Gmm-u5j Samples and mass production are available now. Please contact GlobalTop sales representative for more information.

Gmm-u5j Key Features and Specifications:

General GPS System:

Chipset: Mediatek Technology MT3329

- Frequency: L1, 1575.42MHz
- Sensitivity: -165dBm (tracking); -158dBm (acquisition)
- Position Accuracy: 3.0m 2D-RMS (without aid); 2.5m 2D-RMS (DGPS)
- Update Rate: 1 to 10 Hz
- DGPS: SBAS (WAAS, EGNOS, MSAS, GAGAN)
- AGPS Support for Fast TTFF
- 1 UART (TTL) and 1 USB I/O
- Power Consumption: 26mA typical (typical); 26mA typical (acquisition)

Antenna Advisor:

Active / Passive Antenna Detection and Notification

- Open Circuit Detection and Notification
- Short Circuit Protection and Notification

Anti-JACK™:

Jamming Sensitivity: -50dBm (high sensitivity) & -40dBm (low sensitivity)

- Auto Jamming Sensitivity Selection based on Antenna Type (Active vs. Passive)
- Jammer Status Report via Customized NMEA and Hardware Pin Voltage Output
- Power Saving Mode for Jammer Detection
- Test Software for Windows PC Platform

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