RF as a Service
OEM / ODM

GPS
Application

Design and Manufacturing Service

We provide GPS module ODM/OEM service,
any GPS receiver you want, we can provide customized services.

GPS Antenna Module

WGM-U6

- u-blox 6 position engine:
  - Navigate down to –162 dBm and –148 dBm coldstart.
  - Faster acquisition with AssistNow Autonomous.
  - Configurable power management.
  - Hybrid GPS/SBAS engine (WAAS, EGNOS, MSAS).
  - Anti-Jamming technology.
- A-GPS: AssistNow Online and AssistNow Offline services, OMA SUPL compliant.

WGM-U8

- Concurrent reception of up to 3 GNSS (GPS, Galileo, GLONASS, BeiDou).
- Industry leading –167 dBm navigation sensitivity.
- Industry lowest current consumption.
- Superior position accuracy in urban canyons.
- Security and integrity protection.
- Support for all satellite augmentation systems.
- Operating temperature range of -40° to +105°C for automotive grade chip.

WGM-UDR8

- UDR(untethered dead reckoning) GNSS solution.
- Independent of any electrical connection to the car.
- Positioning accuracy in dense cities and covered areas.
- Complete positioning solution with integrated 3D sensors.
- Real time positioning update rate of up to 20 Hz.

WGM-P6

- High precision of < 1 m.
- High accuracy positioning at a fraction of the cost.
- u-blox 6 position engine:
  - Navigate down to –160 dBm and –146 dBm coldstart.
  - Faster acquisition with AssistNow Autonomous.
  - Hybrid GPS / SBAS engine (WAAS, EGNOS, MSAS).
  - Anti-Jamming technology.
- A-GPS: AssistNow Online and AssistNow Offline services, OMA SUPL.

WGM-P8

- Integrated Real Time Kinematics (RTK) for fast time to market.
- Smallest, lightest and energy efficient RTK module.
- Complete and versatile solution due to base and rover variants.
- World leading GNSS positioning technology.

WGM-T8

- Concurrent reception of GPS / QZSS, GLONASS, BeiDou, Galileo.
- Market leading acquisition and tracking sensitivity.
- Optimized accuracy and availability with Survey-in and single-satellite timing.
- Minimized power consumption with low duty-cycle operation.
- Maximized reliability with integrity monitoring and alarms.

GPS Logger Module

- u-blox6 high performance chipset designed for fast and accurate fix on GPS signals.
- Low power consumption for 28 hours continuous operation.
- Support Bluetooth interface to connect other device.
- Plug and Play without installation of any driver or software.
- Auto-show track on Google Maps without any further operation.
- Support Micro-SD card with huge memory for logging.
- Support inbuilt backup memory (260,000 way-points).
- Firmware upgradeable via PC.
- WBT_Tool (the inbuilt software) supports following.

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GPS Logger

GNSS Receiver

HIGH-SPEC, LOWER PRICES

WGM-303 is a highly sensitive GNSS receiver based on u-blox M8 chipset which is built-in antenna. You can use the GNSS Receiver in automotive navigation, security tracking purpose, map making and fleet management. Providing reliable positioning in difficult environments, meet even the most stringent requirements in versatile industrial and consumer applications, such as UAVs, vehicles (car, truck, bus etc.) and asset tracking. The optional connectors of USB and PS / 2 enable the connection with a laptop, car PC and other electronic devices. It compatible with Microsoft Windows 10, 8.1, 8, as well as 7, Vista.

General	
GNSS Receiver Type	72-channel u-blox M8 engine, GPS/QZSS L1 C / A, GLONASS L10F, BeiDou B1I Galileo E1B / C, SBAS L1 C / A: WAAS / EGNOS / MSAS / GAGAN
Sensitivity	Tracking & Navigation: -167 dBm, Reacquisition: -160 dBm, Hot Start: -157 dBm, Cold Start: -148 dBm
Antenna Type	Built in Patch Antenna
Protocol / Interface	NMEA0183, RTCM2.0(input only), USB / RS-232 / UART
Accuracy	2.0m CEP (GPS / SBAS / QZSS+GLONASS)
Update Rate	Single GNSS Up to 18 Hz, 2 Concurrent GNSS Up to 10 Hz
Acquisition Time	
Cold Start	26 sec. (average)
Aided Starts	2 sec. (average)
Reacquisition	1 sec. (average)
Dynamic Conditions	
Altitude	50,000 meters max
Velocity	500 meters / second max
Acceleration	Less than 4g
Power	
Main Power Input	WGM-303U: 5V (From USB), WGM-303P: 5V, WGM-303PW: 5~36V
Power Consumption	Acquisition 50 mA @5V, Tracking 45 mA @5V
Physical Characteristics	
Dimension (L x W x H)	40 x 37 x 11 mm
Cable Length	1.7 M
Operating Temperature	-40°C ~ +85°C

* Specifications are subject to change, in the interest of technical improvement, without notice or obligation.

Wintec® wireless electronics

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