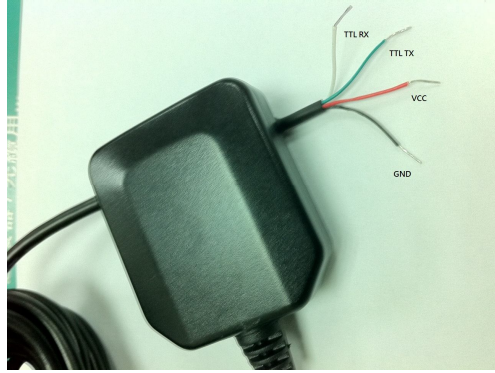


GPS Locator for 10Hz

MODEL: GM88U-M8-OPEN



GM88U-M8 is a GPS Mouse receiver build-in high performances -167dBm u-blox 8 GPS chipset. GM88U-M8 provides customer high position, velocity and time accuracy performances as well as high sensitivity and tracking capabilities. Customers benefit from the strength of both companies.

Thanks to the low power consumption technology, the GPS-Mouse receiver is ideal for many portable applications such as PDA, Tablet PC, smart phone etc.

Features

- ◆ 72 channel Ublox 8 positioning engine.
- ◆ Ultra high sensitivity to -167 dBm.
- ◆ Support maximum 10Hz Update rate
- ◆ GPS L1C/A, SBAS L1C/A, QZSS L1C/A and Galileo E1B/support.
- ◆ Supports GPS/QZSS L1 C/A, GLONASS L10F, or BeiDou B1 SBAS L1 C/A: WAAS, EGNOS.
- ◆ Supports UART, USB and RS232 interface.
- ◆ LED indicate location fix.
- ◆ Ultra low power consumption.
- ◆ Operating temperature range: -40 to 85°C
- ◆ RoHS compliant (lead-free)
- ◆ Water proof (IPX6)

Applications

- ◆ Automotive
- ◆ Personal/Portable Navigation (PDA)
- ◆ Geographic Surveying
- ◆ Sports and Recreation
- ◆ Marine Navigation
- ◆ Fleet Management
- ◆ AVL and Location-Based Services

Specifications

General		Accuracy	
GPS Chip	U-Blox M8 GPS chip	Position	
Frequency	L1, 1575.42MHz	2.5 meters CEP 2 meters SBAS	
C/A Code	1.023 MHz chip rate	Velocity	
Channels	72 CH	Time	1ms synchronized to GPS time
		Datum	
		WGS-84	
To – 167Bm Tracking, Superior Urban Canyon Performance		Dynamic Conditions	
		Altitude	50,000 meters max.
		Velocity	500 meters /sec max.
Acquisition Rate		Acceleration	<4g
Cold Start	26 sec, average		
Warm Start	25 sec, average		
Hot Start	1 sec, average	GPS Protocol	
Reacquisition	2 sec, average	Default: NMEA-0183, GGA(1), GSA(1), GSV(1), RMC(1), Band rate 38400 bps, RS232/10Hz output ,	
Accuracy	Snap start 0.2s, average		
Power			
Operation Power	3.3~5.0 VDC		
Current Consumption	40mA (Tracking) / 37mA (Navigation)	Device Size	
Backup Power		41.0x36.0x15.0 mm	
Environmental			
Operating Temperature	- 40 °C to + 85 °C	Water Proof	
Relative Humidity	5% to 95% non-condensing	IPX6	

All specifications are subject to change without notice

◆ Pin Assignment of bare wire out

Signal	Wire color
GND	Black
VCC 5.0V	Red
RS232 RX	White
RS232 TX	Green

NMEA output message

NMEA-0183 V3.0 Output Messages

NMEA Sentence	Description
GGA (default)	Global Positioning System Fixed Data
GLL	Geographic Position - Latitude/Longitude
GSA (default)	GNSS DOP and Active Satellites
GSV (default)	GNSS Satellites in View
RMC (default)	Recommended Minimum Specific GNSS data
VTG	Course Over Ground and Ground Speed
ZDA	Time and Date