

Mini GPS Locator

Model: GU-158

V1.0 2012-02-24



DB-9 interface with RS-232
protocol



USB interface

Overview:

The main goal of GU-158 is to be used as a part of integrated system, which can be a simple PVT (Position-Velocity-Time) system, for instance, G-mouse, PND (Personal Navigation Device), or complex wireless systems, such as a system with GSM function, a system with Bluetooth function, and a system with GPRS function. The module (GU-158) can be the best candidate for users' systems as the users' systems need the careful consideration on the performance, sensitivity, power consumption, and/or size of the module. In the specification of GU-158 at the next page, it is noticeable that in addition to excellent start-up times and position accuracy, the updated rate can be up to 5 Hz and the sensitivity of -160dbm.

Features:

- Active antenna on board helps the system integrators to do the design-in easily.
- High sensitive GPS Locator and GPS antenna.
- The perfect match is most suitable for any mobile devices, such as PND, GPS PDA, personal tracker and any portable devices, which need GPS features.

Specifications:

PHYSICAL CONSTRUCTION		
Dimension	L46.4mm*W38.4mm*H16.1mm	
Weight	214 gram(with cable)	
Receiving frequency	1575.42MHZ; C/A code	
Enclosure	Highly impact; corrosion-proof	
Mounting	Magnetic mount	
Construction	Ultrasonic welded, fully waterproof	
ENVIRONMENTAL CONDITIONS		
Temperature	Operating: -30 ~ +80 ℃	
	Storage: -35 ~ +85 ℃	
COMMUNICATION		
Protocol	NMEA V3.01	
Interface	USB 2.0, RS-232, TTL	
INTERFACE CAPABILITY		
Standard Output Sentences	GGA,GLL,GSA,GSV,RMC,VTG	
PERFORMANCE		
Built-in Antenna	Highly-reliable ceramic patch	
Sensitivity	-160dBm	
SBAS	1 channel (Support WAAS, EGNOS, MSAS,GAGAN)	
Receiver architecture	50 parallel channels	
Start-up time	1 sec. typical (hot start) 35 sec. typical (warm start) 41 sec. typical (cold start)	
Position accuracy*	Without aid: 2.5 CEP	WAS: 2 m
Velocity	0.1 Knot RMS steady state	
Update Rate	1 Hz(standard), Optional: Up to 5Hz	
Power Supply	5V	
Power Consumption	Acquisition: 67mA, Tracking: 47mA	
Baud Rate	9600 bps (default) Optional:4800/19200/38400/115200 bps are adjustable	
POWER CABLE		
Length	5m	

* CEP, 50%, 24 hours static, -130dBm, SEP: <3.5m

Application Diagram: (UNIT 單位:mm, TOLERANCE 公差:0.3mm)

