

GM-11

Ultra Low Power of Nemerix GPS Technology



Feature:

- For Personal mobile positioning, Car Navigation , Marine Chart Navigation ,Fleet Management ,AVL and Location-Based Services , Auto Pilot ,Tracking devices/systems and Mapping devices application.
- Builds on one of the most reliable NEMERIX chipset from Sweden for most of applications
- 16 channels “All-in-View” satellite-tracking channels for fast acquisition and reacquisition
- Average Cold Start is in less than 45 seconds.
- MTI-3T 1.043”x1.043”x0.27” (26.5x26.5x7.0mm) for easy integration into hand-held device.
- TTL level serial ports with one for GPS receiver command message Interface, and one for RTCM-104 DGPS input.
- Compact Board Size MTI-3 1.043”x1.043”x0.11”(26.5x26.5x3.0mm)
- MTI-3T 1.043”x1.043”x0.27” (26.5x26.5x7.0mm) for easy integration into hand-held device.
- Option Accurate 1PPS Output Signal Aligned with GPS Timing
- On chip 4Mb flash memory.
- Reacquisition Time: 0.1 seconds
- Support Standard NMEA-0183 and NEMERIX Binary protocol
- Multi-path Mitigation Hardware
- Optimum clock drift adjustment
- Enhanced algorithms provide superior navigation performance even in urban, canyon and foliage environments

Specification:

GPS Chip **NEMERIX GPS module**

Performance

Frequency	L1, 1575.42MHz
C/A Code	1.023MHz chip rate
Channel	16 channels all in view
Tracking Sensitivity	-152dBm

Acquisition Rate

Cold Start	45 sec, 50%
Warm Start	38 sec, 50%
Hot Start	10 sec, 50%
Reacquisition	100ms, average
Update Rate	1 Hz

Accuracy

Position	3m CEP (50%), 7m (90%)
Velocity	0.1m/sec, without SA
Time	±100ns synchronized to GPS time

Dynamic Condition

Altitude	<18,000m
Velocity	<515m/sec
Acceleration	<4g

GPS Protocol

NMEA-0183 (V2.20)—GGA, GSA, GSV, RMC

Interface

USB connector	20cm with PS2 jack
RS232 connector	50cm
PDA connector	Compaq ,HP, Toshiba series

Dimensions

W x D x H (mm)	53 x 60 x 26
W x D x H (inch)	2 x 2.3 x 1
Weight	60g
Power	DC 3.6 ~ 5.5V, 35mA typ.
Internal Back-up battery	3.0V, 3.0mAh, Lithium
Back-up Current	4uA typ

Environmental

Operating Temperature -40°C ~ +85°C
 Storage Temperature -55°C ~ +85°C
 Relative Humidity 5% to 90% non-condensing

Others - Data Cable (Length)

2m (6 pin) (Pin assignment refer to figure 1)

Standard Package

Box Yes
 User Guide Yes
 CD-ROM Yes
 Warranty Card Yes

