POLSTAR
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PMB-688
PMB-288

High Sensitivity
GPS Module

- Built-in SiRFstarIII chipsets receivers give unparalleled GPS performance and precision. 20 parallel satellite-tracking channels for fast acquisition and reacquisition.
  Built-in Sony CXD2951GA-4 chipsets receivers give the better Time-To-First-Fix (TTFF) for positioning. 12 parallel satellite-tracking channels for fast acquisition and reacquisition.
- Built-in WAAS/EGNOS Demodulator.
- Low power consumption and ultra mini size only 33 x 39mm.
- Built-in rechargeable battery for memory and RTC backup
- Support NMEA0183 v2.2 data protocol.
- Enhanced algorithms providing superior navigation performance in urban, canyon and foliage environments.
- For Car Navigation, Marine Navigation, Fleet Management, AVL and Location-Based Services, Auto Pilot, Personal Navigation or touring devices, Tracking devices/systems and Mapping devices application.
- Include RF MMCX connector (Optional : Active Antenna)

SPECIFICATIONS

	PMB-688	PMB-288
GPS IC	SiRFstarIII	SonyCXD2951GA-4
Receiver:	Tracking upto20satellitesL1,1575.42MHz,C/Acode	Trackingupto12satellitesL1,1575.42MHz, C/Acode
Accuracy:	Position:2DRMSapproximately5m,WAASsupport Velocity:0.1m/s withoutSAimposed. Time: ±1μsec	Position:2DRMSapproximately2m,WAASSUPPORT. Velocity:0.1m/secwithoutSAimposed. Time: ±1μsec
Acquisition Time:	ColdStart: 42sec(Average) Warm Start: 38sec(Average) HotStart: 1sec(Min.)	Coldstart: 45sec (Average) Warmstart: 35sec(Average) Hotstart: 2sec(Min.)
Sensitivity:	Acquisition: -148dBm Tracking: -159dBm	Acquisition: -139dBm Tracking: -152 dBm
Dynamics:	Altitude: 18000m(Max.) Velocity: 515m/s (Max.) Acceleration: ±4g (Max.)	Altitude: 18,000m(Max.) Velocity: 500m/sec (Max.) Acceleration. ±4g (Max.)
Navigationupdate rate :	Oncepersecond	Onceper second
Serial Port :	TTL	TTL
BaudRate:	4800 bps(Optional9600,19300,38400bps)	4800 bps(optional 9600bps,19200bps,38400bps)
Output Message:	NMEA0183 V2.2 GGA,GSV, GSA, RMC (optionalVTG, GLL)	NMEA0183V2.2GGA,GSV,GSA,RMC,(optionalVTG,GLL)
Datum:	WGS84	WGS 84
Power supply :	DC3.3V~5V	DC 3.3V ~ 5V
Power Consumption :	Typical65mA@5V	Typical 80mA@5V.
LED Function:	Poweron/offandNavigation	Poweron/offandNavigation
Operating Temp.:	-40℃~+85℃	-40° ~ +85°C
Storage Temp.:	-40℃~+100℃	-40° ~ +100°C
Humidity:	5%~95%	5%~95%
Antenna Type:	Built-inPatchantenna	Built-inPatchAntenna.
RF Connector :	MMCX type (Optional : ActiveAntenna)	MMCXtype(Optional:ActiveAntenna)