

GM-3 N Wired GPS Receiver



GM-3 series is a cabled GPS solution with compact size. Equipped with antenna, back up battery, GPS engine and it provides superior navigation performance under dynamic conditions in areas with limited sky view like urban canyons. High sensitivity up to -165dBm for weak signal operation without compromising accuracy. GM-3 is your best choice for cabled GPS applications.

Key Features:

- Small form factor with IPX7 waterproof
- High sensitivity -165dBm
- Tracks 66/99-Channel of satellites(Note1)
- Support GPS, GLONASS, GALILEO and BEIDOU(Note 2)
- Support QZSS and SBAS(WAAS/EGNOS/MSAS/GAGAN)
- EPO™ / HotStill™ orbit prediction
- EASY™ self-generated orbit prediction
- FCC E911 compliance and A-GPS support

Applications:

- Automotive and Marine Navigation /Tracking
- Geographic Surveying
- Emergency Locator
- Sporting and Recreation
- Car Black box external GPS receiver

Note 1: Tracking channel will be limited to 12 when GPS update rate is above 2 with Multi-GNSS

Note 2: GLONASS and BEIDOU cannot be enable at the same time.

Specification	Description		
General	L1 frequency, C/A code (SPS)		
	GM-3 N: Support GPS, GLONASS, GALILEO, BEIDOU Note: GLONASS and BEIDOU cannot be enable at the same time		
	GM-3 N: 33 tracking / 99 acquisition channels Note: Tracking channel will be limited to 12 when GPS update rate is above 2 with Multi-GNSS.		
Sensitivity	-165dBm / Tracking, -148dBm / Acquisition(cold), -163dBm / Acquisition(Hot)		
Update Rate	Up to 10Hz (Default 1Hz, above 1Hz is not available for EASY self-generated orbit prediction)		
Accuracy	Without aid: 3.0m 2D-RMS		
	<3m CEP (50%) without SA (horizontal)		
	SBAS (WAAS, EGNOS, MSAS, GAGAN): 2.5m		
	Supports multi-GNSS incl. QZSS, SBAS ranging		
Acquisition (open sky)	Cold Start : 35 sec		
	Warm Start : 34 sec		
	Hot Start : 1 sec		
	Cold Start (EPO™ / HotStill™ orbit prediction , EASY™ self-generated orbit prediction): 5~10 sec		
Reacquisition	< 1sec		
Dynamic	Altitude: 18000m (max.)	Velocity: 515m/sec (max.)	Acceleration: 4G (max.)
Supply Voltage	DC 5V±5%	Power Consumption 40mA @ 5V / Tracking	Backup Battery Build-in (5.5mA)
NMEA Message	NMEA0183 v3.01, baud rate selectable 4800/9600/... /57600/115200 , default 9600		
	Selectable Output: GGA, GLL, GSA, GSV, RMC, and VTG		
Datum	Default WGS-84		
Antenna	Build-in 25x25x4 mm patch antenna, right hand circular polarization, 50ohm		
Signal Level	USB Bridge (CP210x, Driver for Windows, MAC OS, Linux, Win CE), Low Voltage TTL		
Connector	Type A USB with 3 meters cable / Mini B USB with 3 meters cable		
Status Indication	LED (Orange color), solid on: searching for satellite, 1Hz flashing: GPS fix		
Operating Temperature	-40°C to 80°C	Storage Temperature -40°C to 85°C	Humidity <=95%, non-condensing
Dimension	1.65" x 1.38" x 0.59" / 42 x 35 x 15 mm(cable excluded)		
Models			
GM-3 N RU300	Support GPS/GLONASS, Receiver, USB signal, 118"/ 300cm cable, Type A USB connector		
GM-3 N RT300	Support GPS/GLONASS, Receiver, TTL signal, 118"/ 300cm cable, Mini B USB connector		

*Specification is subject to change without prior notice.



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