M900 GNSS Receiver

M Series GNSS Receiver | Ver.2020.08.31

Size: 183mm x 171mm x 56mm
Weight: About 1Kg

M900
GNSS Receiver

Reliable GNSS Inside

Integrating with a high performance GNSS OEM Board inside, M900 GNSS receiver can provide centimeter - level positioning and high accuracy heading. With dual antenna connectors in one compact box, it is an economical choice for challenging guidance and position applications including fleet management, marine, UGV and related unmanned control systems.

Features

- GPS L1/L2, BeiDou B1/B2, GLONASS L1/L2, Galileo E1/E5b, QZSS, SBAS,IRNSS
- Dual Antennas Design for Positioning and Heading
- LAN and WIFI support Webpage Configuration
- Advanced QUANTUM™ Technology
- Support INS+GNSS navigation
- Support PPS and Event Marker

Flexible Interfaces

The M900 is designed with two 7-pin Lemo connectors which supports 2*RS-232, USB and CAN function and LAN port for data transmission and webpage configuration. Furthermore, the M900 provides more interfaces, such as BT, WIFI, radio and 4G, enabling users to get multiple data flow for various demands.

SinoGNSS®
By ComNav Technology Ltd.

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Signal Tracking

Channels	1226
GPS	L1 C/A, L2C, L2P
GLONASS	L1 C/A, L1P, L2 C/A, L2P
BeiDou	B1, B2
BeiDou Global Signal	B1C, B2b
Galileo	E1, E5b
More	QZSS, IRNSS, SBAS, L-Band

Performance Specifications

Cold Start	<50s
Warm Start	<45s
Hot Start	<15s
Signal Reacquisition	<1.5s
RTK Initialization time	<10s
Velocity accuracy	0.03m/s
Time accuracy	20 ns

Positioning Specifications

Post Processing	2.5 mm + 1 ppm Horizontal 5 mm + 1 ppm Vertical
RTK	8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
DGPS	<0.4m
SBAS	1m 3D RMS
Standalone	1.5m 3D RMS
PPP	10cm Horizontal 20cm Vertical
Heading Accuracy	(0.2/R)°
Pitch and Roll	(0.4/R)°

Communications:

Bluetooth® 4.0	Compatible with Android™ and Windows™ mobile OS
4G modules	Support Ntrip Protocol
UHF	410MHZ - 470 MHZ
1 RJ45 & 1 WIFI	TCP, Ntrip Protocol and WebServer

2 TNC connectors for external antenna

2 × 7-pin Lemo data I/O interface, contains 2 RS232, 1 CAN BUS, 1 USB

1 LED indicating Satellite Tracking

1 front-panel indicating Satellite Tracking, Position and Configuration

Data Format

Correction data I/O	RTCM2.X, 3.X, CMR/CMR+(GPS Only)
Position data output	-NMEA 0183 GSV, RMC, HDT, GGA, GSA, ZDA, VTG, GST; PTNL,PJK; PTNL, AVR; PTNL, GGK -ComNav Binary -BINEX Data: 0x00, 0x01-01, 0x01-02, 0x01-05, 0x7d-00, 0x7e-00, 0x7f-05 - Position data output rate up to 20hz

Physical

Size	183mm x 171mm x 56mm (With connectors)
Weight	About 1kg

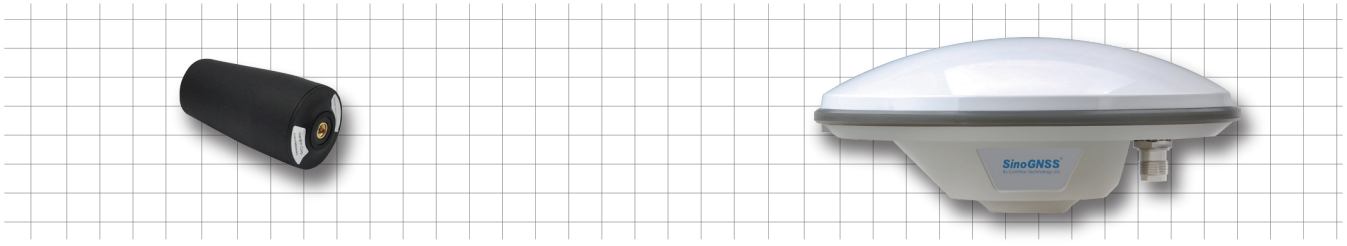
Electrical

Power supply	5V~27V
Power consumption	<3W

Environmental

Working temperature	-40 ℃ to +75 ℃
Storage temperature	-55 ℃ to +85 ℃
Humidity	95% no condensation
Shock	Designed to survive a 1m drop onto concrete

Antenna (Optional)



Helix Antenna AT190 Size: Φ27.5x59mm

Geodetic Antenna AT340 Size: Φ152x62.2mm

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