



Multipurpose device where heading is critical

Like its sister device the M300, the M600 is designed as the multi-purpose sensor for different kinds of applications which need high accuracy positioning, but the M600 provides heading. With the unique design and the powerful integration ability, M600 provides the solutions to different kinds of moving carriers such as vehicle, ship, harbor construction machine, aircraft, radar and other high accuracy requested projects.

Dual Antenna Input Saves Costs

By integrating two antenna connectors in one compact box, the M600 outputs high accuracy positioning and heading with just one device. The external dual GNSS antenna input design makes the receiver easy and safe to use in different kinds of environments just by putting the antenna with a clear view of the sky.

Dual Constellations Technology

With the advanced dynamic acquisition ability and the high accuracy carrier phase calculating, the GPS+BeiDou dual constellation, high dynamic processing engine enhances the reliability of results in challenging environments. Rapid refresh rates make it suitable for moving vehicles.

All in one

If you combine the GNSS with the optional UHF modem you have a very capable unit in a compact enclosure. Easy to configure to output different data formats to meet specific requirements.



Features

- ⚙️ **Dual antenna connectors design**
- ⚙️ **GPS + BeiDou/GLONASS' dual satellite constellations**
- ⚙️ **Configurable for different kinds of data output**
- ⚙️ **Built in over current and overvoltage protection system**

Signal Tracking

- 120 Channels
 - GPS: L1 C/A code, L1/L2 P code
 - BeiDou: B1, B2, B3
 - GLONASS: L1, L2
 - SBAS: WAAS, EGNOS, MSAS, GAGAN

Performance Specifications

- Cold start: <50 s
- Warm start: <45 s
- Hot start: <15 s
- Signal re-acquisition: <2 s
- Velocity accuracy: 0.03 m/s

Heading Specifications

- Azimuth Accuracy: $(0.2/R)^\circ$
- Roll and Pitch Accuracy: $(0.4/R)^\circ$ ²

Time Precision

- GPS + GLONASS/BeiDou 20 ns

Positioning Specifications

- Post Processing Static
 - Horizontal: 2.5 mm + 1 ppm RMS
 - Vertical: 5 mm + 1 ppm RMS
- Real Time Kinematics (RTK)
 - Horizontal: 10 mm + 1 ppm RMS
 - Vertical: 20 mm + 1 ppm RMS
- DGPS: <0.5 m 3D RMS
- SBAS: <1 m 3D RMS
- Standalone: < 1.5 m 3D RMS

Communications

- 2 Serial ports (7 pin Lemo), 1 receiving radio antenna port, 2 GNSS antenna port.
- Position data outputs: 1, 2, 5, 10 Hz.
- 1 Pulse Per Second output³
- 4 LEDs (indicating Power, Satellite Tracking and Differential Data)

Data Format

- Correction data I/O:
 - RTCM 2.x, 3.x, CMR (GPS only), CMR+ (GPS only).
- Position and heading data output:
 - ASCII: NMEA-0183 GSV, RMC, HDT, VHD, GGA, GSA, ZDA, VTG, GST, PJK, PTNL
 - ComNav Heading format, GPTRA
 - ComNav Binary (compatible with major brands)

Physical

- Size(L×W×H): 200 mm × 145 mm × 80 mm
- Weight: 1.3 kg (include Internal UHF)
- Case: Rugged and light high performance metal

Environmental

- Operating temperature: -40 °C to + 70 °C
- Storage temperature: -45 °C to + 80 °C
- Humidity: 100% condensation

Electrical

- Power consumption: 3 W
- External power input: 10.5-28 VDC
- Memory: 100 MB

Antenna

- AT300 GNSS Geodetic Antenna, or AT500 GNSS Choke Ring Antenna depending on the applications

Software

- ComNav Compass Receiver Utility software

1 You can choose GPS+BeiDou or GPS+Glonass as the system configuration, need to clarify when place the order.

2 R (meter) is the length of baseline from master to slave.

3 PPS need to clarify when place the order.

Specifications subject to change without notice.

© 2014, ComNav Technology Ltd. All rights reserved. ComNav is the trade mark of ComNav Technology Ltd., registered in People's Republic of China. All other trademarks are the property of their respective owners. (September, 2014).

ComNav Technology Ltd.

Building E, No.50 Alley 2080 Lianhua Road
201103 Shanghai - China

Tel : +86 21 64056796

Fax: +86 21 54309582

Email: sales@comnavtech.com

www.comnavtech.com

