



Model DG-500



Featuring:

Equipped with parallel 32-channel combined GPS/GLONASS engine, ready for SBAS differential corrections using WAAS, MTSAT and EGNOS geostationary satellites plus RTCM-SC104 interface for DGPS beacon corrections

Automatic dual GPS-GLONASS mode reception for accurate, reliable navigational data in all geographical areas, with automatic switchover to more reliable satellite system in the event of degradation in satellite geometry, signal strength, etc. of either constellation

A wealth of digital interfaces including RS-232C, RS-422 and NMEA I/O ports for a variety of onboard applications including AIS, ECDIS, navigation sounders, radars, sonars, etc.

5.7-inch daylight-viewing color TFT LCD display, backlit with white LED lamps for extra long service life

Three text background colors for ease of nav. data reading in all ambient lighting conditions

Display modes include nav. data page with LAT/LON, heading and speed, track plotter page, CDI and MOB pages.

Single keystroke of devoted MOB key permanently stores the current position, automatically displays the MOB page, thereby helping you navigate directly back to the site, easily and in shortest possible time.

Specifications:

GPS/GLONASS Receiver: 32 channels, L1 C/A code (GPS, 1575.42 MHz), L1 CT code (GLONASS, 1592-1606 MHz)

Differential Correction Sources: SBAS (WAAS, MTSAT, EGNOS), RTCM-SC104 Beacon (option*¹)

Positioning Accuracy*² (CEP): 2.5m (autonomous), 2m (SBAS), 1m (DGNSS); without S/A

Data Update Rate: 10 Hz maximum

Data Outputs (IEC 61162-1): AAM, BOD, BWC, DTM, GBS, GGA, GNS, GSA, GSV, RMB, RMC, RTE, VTG, WPE, XTE, ZDA

Display: 5.7" TFT color LCD, LED-backlit, QVGA resolution

Storage Capacity: 2,000 waypoints, 20 reversible routes (with 200 waypoints each)

Digital Interfaces: RS-232C, 2XRS-422, I/O Data (NMEA)

Power Requirements: 24 VDC (safely operates over 11-40V range), approx. 8W

Weight: Approx. 2 kg with bracket attached

Environment: IEC 60945-2002 protected category, IPX 4 for display cabinet, exposed category for antenna

Compass Safe Distances (with mounting bracket attached): 0.6m (standard), 0.35m (steering)

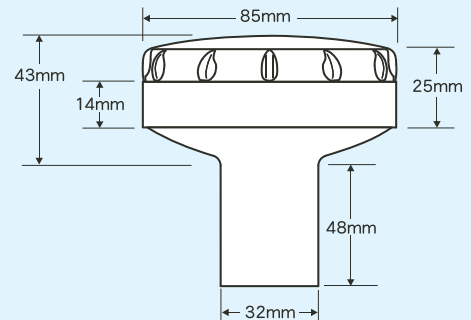
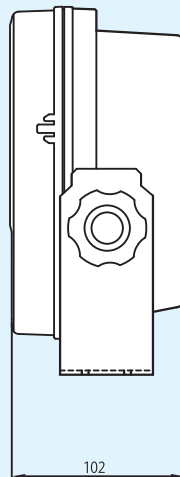
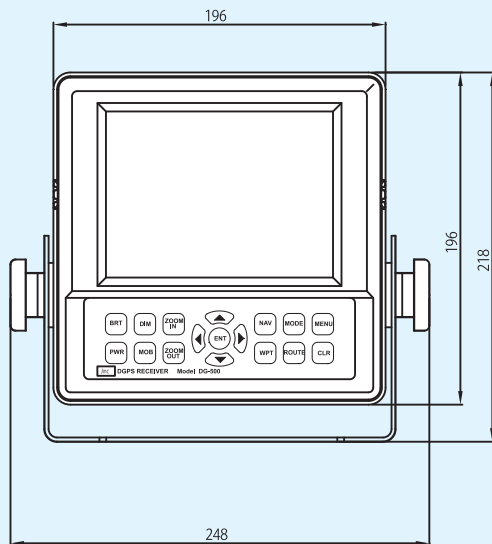
Major Compliant Standards: IMO Res. MSC.112(73), A.694(17), IEC 60945, RF Gov. Technical Reg. #620 (08/2010)

*¹: Optional beacon receiver module and beacon antenna are required.

*²: Accuracy is subject to degradation due to USDoD civilian user policy and Russian Federation Space Agency policy.

NOTE: Specifications are subject to change without notice or obligation.

Dimensions (in mm)

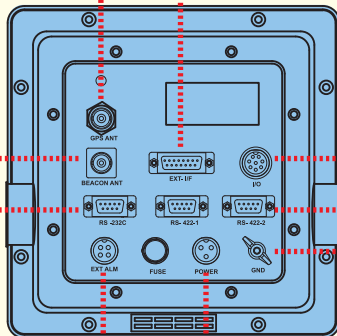


GPS/GLONASS Antenna **GA-660GW**

System Configuration

To GPS/GLONASS antenna **GA-660GW**

To ext. device requiring 1 pps input, DSub-15



To beacon antenna (option)*

To NMEA I/O device, 12V/200 mA output

To ext. device via RS-232C interface

To ext. device via RS-422 interface (2 ports)

To ship's ground

To onboard alarm device

To ship's power source (11-40V)

*optional DGPS beacon module required

Standard Equipment

(1 pc. each, except as specified):

- **DG-500** GPS/GLONASS Navigator
- **GA-660GW** GPS/GLONASS antenna with 15m cable
- Mounting bracket with 2 pcs. clamping knobs
- Plugs:
 - 4-pin plug (alarm output)
 - 8-pin plug (NMEA I/O, 12V/200 mA)
 - DSub-9 (RS-422 & RS-232C), 3 pcs.
 - DSub-15
- Power supply cable, 3m, terminated in 3P plug
- Fuse (2A, mini type, slow-blow), 2 pcs.
- User's Manual