GNSS EQUIPMENT

NGR-1000/NGR-3000

NSR's new generation of IMO GNSS:
- Large 7-inch color LCD
- Touch screen operation
- Data interface to BAM/INS
- GPS, BDS, GLONASS, GALILEO (optional)
- DGPS with NSR beacon
- Type approval with DNV (MED) and CCS

NGR-1000	CCS
NGR-3000	DNV

- Comprehensive navigation data displays.
- Storage for up to 999 waypoints and 30 routes.
- 7-inch color LCD, touch screen operation with adjustable brilliance.
- Dedicate port for BAM system/INS connection.
- 3 GNSS data outputs.
- Possible to be upgraded to DGNSS.
- Meets the requirements of relative IMO and IEC regulation & standards, including IMO MSC.112 (73), MSC.302 (87), IEC 61108-1, etc.

DNV CCS GPS BDS GLONASS COLOR DISPLAY TOUCH SCREEN BAM

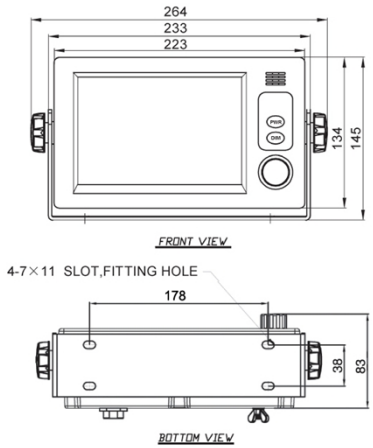
SPECIFICATIONS

- **GNSS RECEIVER**
  - Receiving System: 50 channels parallel
  - RX Frequency: GPS L1, GLONASS L1, BDS B1
  - RX Code: C/A code
  - Position Accuracy: Approx. 2.5m, 95% of the time, horizontal dilution of precision (HDOP) ⩽ 4
  - Tracking Velocity: 999 kts
  - Position-fixing Time: Warm start: 30 seconds; Cold start: 45 seconds
  - Position Update Interval: 1 second
- **DISPLAY SECTION**
  - Display: 7 inch, color LCD, touch screen operation
  - Fix Mode: GPS/GLONASS/BDS/GALILEO (optional)
  - Alerts: Lost of Position, HDOP > 4, DGNSS lost, Integrity Status
- **INPUT/OUTPUT DATA**
  - Output Data: RS422, max 3 ports, Baud Rate 4800/9600/19200/38400 bps
  - Sentences: GNS, GBS, GGA, RMC, VTG, ZDA, DTM, etc.
  - BAM/INS Connection: IN/OUT, RS422
- **POWER SUPPLY**: DC 24V (range 12 ~ 36 V), 0.25 ~ 0.50 A
- **SIZE & WEIGHT**
  - Size: 145 (H)×264 (W)×83 (D) mm
  - Weight: 1.25 kg (Main Unit)
- **ENVIRONMENTAL CONDITIONS**
  - Operating Temperature: Antenna Unit: -40°C ~ +55°C; Main Unit: -20°C ~ +55°C
  - Relative Humidity: 95% at 40°C
  - IP Grade: IP66 (Antenna Unit); IP22 (Main Unit)

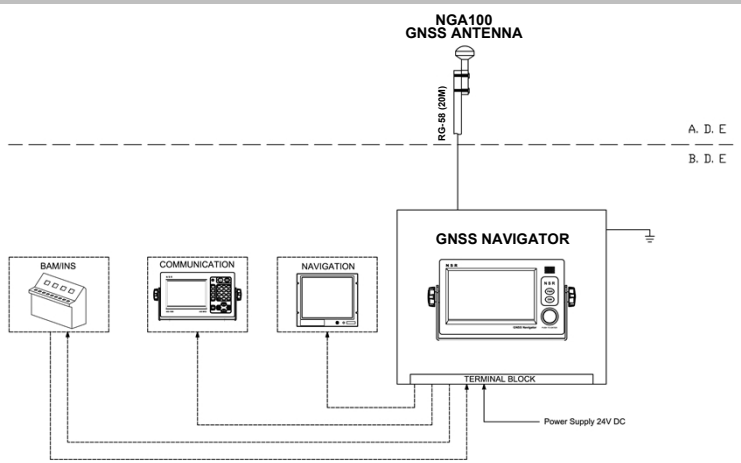
EQUIPMENT LIST

- **STANDARD**
  - GNSS Navigator — NGR-1000/NGR-3000 — 1 pc
  - GNSS Antenna with Cable — NGA100 — 1 pc
  - Installation Materials — 1 set
- **OPTIONS**
  - DGNSS Upgrading Kit — 1 set
  - NMEA Distribution Box — NND-100/NND-200/NND-300 — 1 set
  - AC/DC PSU — PS-10 — 1 pc

SIZE DIMENSION



SYSTEM DIAGRAM



※ *Specifications subject to change without notice*