

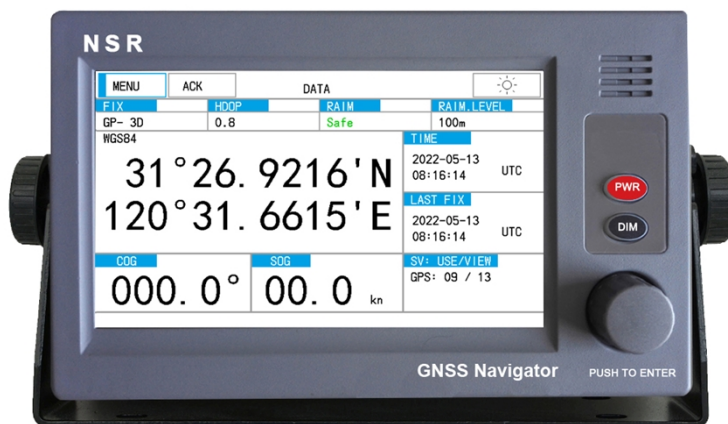
GNSS EQUIPMENT

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
- 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), IMO MSC.302 (87), IEC 61108-1, IEC 62923-1, IEC 62923-2, IEC 62288 etc.



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
- Alerts: Lost of Position, HDOP > 4, DGNSS lost, Integrity Status

● DISPLAY SECTION

- Display: 7 inch, color LCD, touch screen operation
- Fix Mode: GPS/GLONASS/BDS

● 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: -15°C ~ +55°C
- Relative Humidity: 95% at 40°C
- IP Grade: IP66 (Antenna Unit)
IP22 (Main Unit)

EQUIPMENT LIST

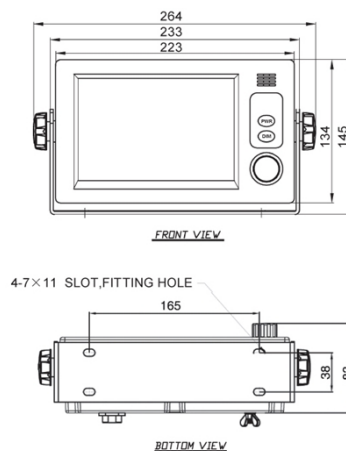
● STANDARD

- GNSS Navigator NGR-1000/NGR-3000 1 pc
- GNSS Antenna with Cable NGA100 1 pc
- Installation Materials 1 set

● OPTIONS

- Beacon Unit (DGNSS Beacon & Antenna) NDG-100 1 set
- NMEA Distribution Box NND-100/NND-200 1 set
- AC/DC PSU PS-10 1 pc
- Flush Mount Bracket 1 pc

SIZE DIMENSION



SYSTEM DIAGRAM

