

**SPECIFICATIONS OF GPS NAVIGATOR
GP-33**

1 GENERAL

- 1.1 Display system 4.3-inch color LCD
- 1.2 Effective area 95.04 x 53.85 mm, 480 x 272 dots (WQVGA)
- 1.3 Projection Mercator
- 1.4 Display mode Plotter, Steering, Highway, NAV data, Destination, User display
- 1.5 Memory capacity Track: 3,000 pts, Waypoint: 10,000 pts w/ comment (13 character)
- 1.6 Storage capacity 100 routes w/ 30 waypoint each
- 1.7 Alarms Arrival and anchor watch, Cross track error, Odometer alarm, Ship's speed, Timer, Trip, WAAS, Voltage
- 1.8 Display scale
 - Plotter display 0.02/0.05/0.1/0.2/0.5/1/2/5/10/20/40/80/160/320 NM
 - Highway display 0.2/0.4/0.8/1/2/4/8/16 NM

2 GPS RECEIVER

- 2.1 Receiving channels
 - GPS 12 channels parallel, 12 satellites tracking
 - WAAS 2 channel
- 2.2 Rx frequency 1575.42 MHz
- 2.3 Rx code C/A code, WAAS
- 2.4 Position accuracy
 - GPS 10 m (95% of the time, 2drms)
 - WAAS 3 m (95% of the time, 2drms)
- 2.5 Tracking velocity 999.9 kn
- 2.6 Position fixing time Within 90 s (cold start)
- 2.7 Position update interval 1 s

3 INTERFACE

- 3.1 Number of port CAN bus: 1 port, NMEA0183: 2 ports
- 3.2 Serial output NMEA0183 Ver2.0/3.0 (current loop and RS-232C)
 - Data sentences AAM,APB,BOD,BWC,BWR,DTM,GGA,GLL,GSV,RMB,RMC,RTE,VTG,XTE,ZDA
- 3.3 CAN bus PGN (NMEA2000)
 - Input 059904, 060928, 061184, 065286, 126208/720
 - Output 059392, 060928, 061184, 126208/464/720/992/996, 127258, 129026/029/033/044/283/284/285/538/539/540, 130822/823
- 3.4 Contact signal Event switch (MOB input), Speed alarm (output)

4 POWER SUPPLY

12-24 VDC: 0.24-0.12 A (LEN: 7)

5 ENVIRONMENTAL CONDITION

5.1 Ambient temperature

Antenna unit -25°C to +70°C

Receiver unit -15°C to +55°C

5.2 Relative humidity 93% at 40°C

5.3 Degree of protection IP56

5.4 Vibration IEC 60945

6 UNIT COLOR

6.1 Antenna unit N9.5

6.2 Receiver unit N2.5