#### **SPECIFICATIONS OF**

### GP-33

#### **DISPLAY**

Screen Size 4.3" color LCD **Effective Display Area** 

95.04 (W) x 53.85 (H) mm 480 (V) x 272 (H) pixels **Pixel Number** 

**Display Mode** 

Plotter, Highway, Steering, Nav Data, Satellite, User Display1, User Display2

#### **Memory Capacity**

3,000 ship's track points

10,000 marks and waypoints with comments

100 routes, 30 waypoints/route

Arrival, Anchor watch, XTE, Speed, WAAS, Time, Trip, Odometer

#### **GPS/WAAS**

**Receiver Type** 

GPS: Twelve discrete channels, C/A code, all-in-view WAAS receiver: Standard fitted in display unit

**Receive Frequency** L1 (1575.42 MHz)

Less than 90 seconds (Cold start) Time to First Fix

**Tracking Velocity** 999.9 knots

**Geodetic Systems** WGS-84 (and others)

#### **ACCURACY**

GPS: Better than 10 m (2rdms) WAAS: Better than 3 m (2rdms)

#### **INTERFACE**

#### **Ports**

DATA1: CAN bus

DATA2: NMEA0183 (ver 2.0, 3.0)

DATA3: RS-232C

#### Output

NMEA0183

AAM, APB, BOD, BWC, BWR, DTM, GGA, GLL, GSA, GSV, RMB, RMC,

VTG, XTE, ZDA

CAN bus

059392, 060928, 061184, 126208, 126464, 126720-1, 126720-2, 126992, 126996, 127258, 129026, 129029, 129033, 129044, 129283,

129284, 129285, 129538, 129539, 129540, 130822, 130823

#### Input

CAN bus

059904, 060928, 061184, 065286, 126208, 126720

**POWER SUPPLY** 15 VDC: LEN7 (CAN bus)

12-24 VDC: 0.24-0.12 A (Non CAN bus)

#### **ENVIRONMENT**

Display unit: -15°C to +55°C Temperature

Antenna unit: -25°C to +70°C Waterproofing Display unit: IP56

Antenna unit: IPX6

#### **EQUIPMENT LIST**

#### Standard

1. Display unit GP-33 with drop cable 6 m 1 unit 2. Antenna unit GPA-017 with cable 10 m 1 unit

3. Standard spare parts and installation materials Option

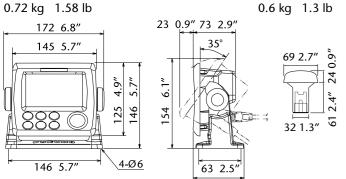
1. Junction box FI-5002

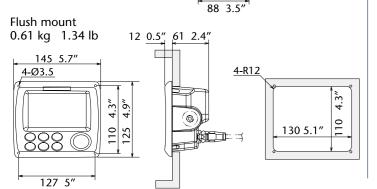
2. Cable assembly KON-004-02M (NMEA0183) 2 m

#### OFFICIAL NAME OF THE EQUIPMENT

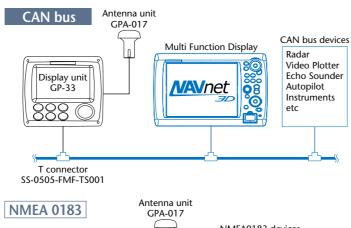
GPS Navigator GP-33

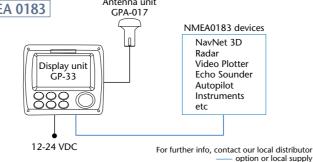
#### **Display Unit GPS** Antenna **GP-33 GPA-017**





#### **INTERCONNECTION DIAGRAM**





SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE All brand and product names are registered trademarks, trademarks or service marks of their respective holders

FURUNO ELECTRIC CO., LTD. FURUNO ESPAÑA S.A.
Nishinomiya, Hyogo, Japan
www.furuno.co.jp Madrid, Spain
www.furuno.es

**FURUNO U.S.A., INC. FURUNO DANMARK AS** www.furuno.dk **FURUNO (UK) LIMITED FURUNO NORGE A/S** 

**FURUNO FRANCE S.A.S.** 

FURUNO POLSKA Sp. Z o.o.

www.furuno.pl

**FURUNO SVERIGE AB FURUNO DEUTSCHLAND GmbH FURUNO FINLAND OY** 

FURUNO EURUS LLC **FURUNO HELLAS S.A.** 



10025U Printed in Japan





## 5P-3= GPS NAVIGATOR







# A smart navigation solution that fits perfect into your console

Compact in size, yet big on features and performance, the FURUNO GP-33 is the perfect GPS navigator for a wide range of vessels. This advanced unit provides accurate and reliable position fixing, thanks to a super sensitive, 12-channel GPS receiver combined with integrated WAAS technology.

The GP-33 has a waterproof display and is built to stand up to tough marine conditions. The durable casing houses an impressive memory, capable of storing up to 3,000 points of ship's track, 10,000 points for marks and waypoints, and 100 routes of up to 30 waypoints each. Vital navigation data is presented on a 4.3" color LCD.

The GP-33 features FURUNO's CAN bus interface system for feeding highly accurate navigation data to your NavNet 3D, radar, chart plotter, autopilot, fish finder or other navigation equipment. The unit offers easy plug-and-play installation with CAN bus network connectivity. NMEA0183 protocol versions are also supported.

- ▶4.3" "Sunlight Viewable" color LCD (Brightness: 700 cd)
- ▶ Enhanced data legibility thanks to large characters and high resolution visual aid
- ► Stores up to 10,000 marks/waypoints, 100 routes and 3,000 track points
- ▶7 display modes available, including 2 user-customized modes

- ► Supports both NMEA0183 and CAN bus interface
- ▶ Contact closure capability available on the 10P connector
- ▶ SBAS capable for better measurement

SBAS is a general term for a GPS navigation system with differential correction by means of geostationary satellites. In the US, it is called WAAS (Wide Area Augmentation System), whereas in Europe and Japan, it is called EGNOS (European Geostationary Navigation Overlay System) and MSAS (MSAT Satellite-based Augmentation System), respectively.

#### **Various Displays**

The GP-33 provides navigation data and displays them in a wide variety of numerical and graphical formats. You may freely select which data you want displayed with easy to use controls. The combination of a high resolution screen and large data fields makes the screen easy to read in almost any condition.

#### NAV data



The nav data display shows receiver status, position in latitude and longitude (or TDs), course over ground, speed over ground, date and time.

#### COG



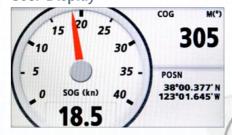
Easy to read digital compass heading display that greatly assists you in maintaining a desired course.



3-D view of own ship's progress toward destination (waypoint). This mode is best used for navigation when a straight line course can be followed.

#### **User Display**

**Highway** 



You choose what data is displayed in the User Display Mode.

#### Plotter



The plotter display traces own ship's track and shows position on a 2-D map\*. This mode presents various data and information with graphic symbols and icons, rather than text. The Auto Waypoint Entry function plots ship's track as "WAYPOINTS". The user may define waypoint entry by time interval, tack angle, etc.

\*The unit does not include charts.



#### What is CAN bus?

cable. You can simply connect any CAN bus devices onto the backbone cable to expand your network onboard. With CAN bus, IDs are assigned to all the devices, and the status of each sensor in the network can be detected. All the CAN bus devices can be incorporated into the NMEA2000 network.

CAN bus is a communication protocol that shares

multiple data and signals through a single backbone

#### **Easy Operation**

Innovative digital graphic displays and intuitive on-screen menu structure provide simple operation and easy access to the features you use most frequently.



