

6-INCH LCD

## MARINE GPS NAVIGATOR

with track plotter

Model GP-80

- High-performance 12-channel GPS receiver, 6-inch LCD display in a compact cabinet
- Several graphic display modes: Track Plotter, 3-D Highway Display, Compass Rose, GPS Monitor and Demo Display
- Memory: 2,000 points for ship's past positions and marks (incl. 99 event marks max.); 999 waypoints; 30 routes each containing up to 30 waypoints
- Displays Navaid's information (lighthouse and buoy) downloaded via PC
- DGPS capability with optional internal DGPS receiver kit or external beacon receiver via RTCM SC104 input
- Aluminum watertight cabinet (IEC 529 IPX5, USCG CFR46) allowing for fly bridge installation
- Four data interface ports:
  - ☞ Two NMEA I/O's (user-programmable)
  - ☞ one NMEA/LOG output
  - ☞ one DGPS (or PC) input



The FURUNO GP-80 is a new high-performance GPS navigator designed for every type of vessel. It consists of a 12-channel GPS receiver with track plotter presented on a clear 6-inch LCD screen. Its high sensitivity GPS receiver allows highly accurate position fixing.

The GP-80 presents a variety of display modes in graphics and alphanumeric: Track Plotter, 3-D Highway Display, Compass Rose, GPS Monitoring Display, and Nav data. In the Highway Display mode, you can intuitively see how to steer and where the next waypoint is located relative to your ship, while displaying the next waypoint's data in 3-D graphics. Navigational information including ship's position (in L/L, Loran TD's or Decca LOP's), speed, course, range/bearing and TTG to a selected waypoint or MOB position is displayed in large characters. The Nav data

### 3-D Highway Display mode



display is user-definable.

The GP-80 has in addition one I/O port for connection of a DGPS beacon receiver or a conventional PC. TLL (target L/L) position downloaded from FURUNO radar series/1500 Mark 3 series can be shown on the GP-80. If higher than standard position accuracy is required, a DGPS receiver kit (incl. antenna and built-in receiver board)

is optionally available or an external DGPS beacon receiver with RTCM SC104 format can also be connected. As a unique function, connection of the FAP-300/330 FURUNO Autopilot allows video pilot operation, thus enabling your boat to follow a planned route.

The compact aluminum display unit is completely waterproof, making it ideal for a fly bridge installation.



The future today with FURUNO's electronics technology.

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Catalogue No. L-148e

TRADE MARK REGISTERED  
MARCA REGISTRADA

# SPECIFICATIONS OF GP-80

## RECEIVER CHARACTERISTICS

- 1. Receiver Type** Twelve discrete channels, C/A code, all-in-view
- 2. Receive Frequency** L1 (1575.42 MHz)
- 3. Accuracy** GPS: 10 m approx.  
(95 % of the time SA off)
- 4. Time to First Fix** 20 seconds typical (Warm start)
- 5. Tracking Velocity** 900 knots
- 6. Geodetic System** WGS-84, NAD-27, and others

## PROCESSOR/DISPLAY CHARACTERISTICS

- 1. Display** 6-inch LCD, 320 (H) x 240 (V) dots
- 2. Scale** Scale: 0.25 to 192.0 nm
- 3. Plot Interval** 1 second - 60 min or 0.01-99.99 nm
- 4. Memory Capacity**  
2,000 points total for ship's track and marks (incl 99 event marks)  
999 waypoints (registered by cursor or L/L entry),  
30 routes (containing 30 waypoints/route)

### 5. Voyage Plan

Waypoint navigation or route navigation

### 6. Alarms

Arrival/anchor watch, XTE, speed, water temp, water depth and trip, DGPS signal

### 7. Interface (NMEA0183)

Output (ver 1.5/2.0):

GPAAM, GPAPA, GPAPB, GPBOD, GPBWC,  
GPBWR, GPBWW, GPGGA, GPGLL, GPRMB,  
GPRMC, GPVTG, GPWCV, GPWNC, GPWNR,  
GPWPL, GPXTE, GPZDA, GPZLZ, GPZTG

Input (ver 1.5/2.0):

DBT, DPT, MTW, TLL (target L/L), GFPA (For autopilot)  
Any of the above sentences can be selected on MENU depending on interconnecting device.

### 8. DGPS capability

- RTCM SC104 v.2.1 format in RS232C level from an external beacon receiver
- With optional DGPS receiver kit OP20-26 (built in)  
Accuracy: 5m or better (95 % of the time SA off)

## ENVIRONMENT (IEC945 test method)

Ambient Temperature: -15°C to +55°C (display unit)  
-25°C to +70°C (antenna unit)

Waterproofing: IPX5 (IEC 529) , CFR46 (USCG)

## POWER SUPPLY AND POWER CONSUMPTION

10.2-31.2 VDC, less than 10 W

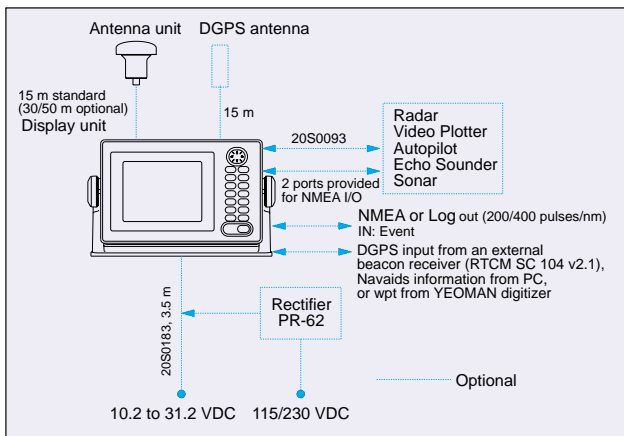
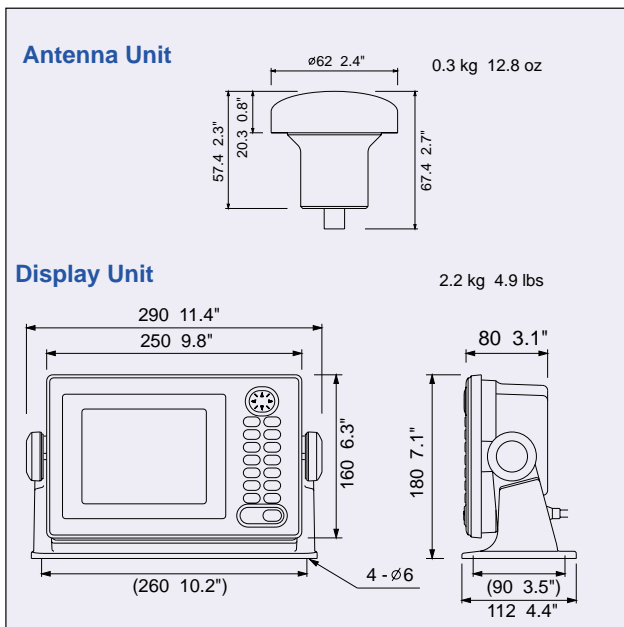
## EQUIPMENT LIST

### Standard

1. Display unit GPR-020 1 unit
2. Antenna unit GPA-017S with 15 m cable 1 set
3. NMEA cable 20S0093, 5m 1 set
4. Installation materials and spare parts 1 set

### Optional

1. DGPS receiver kit OP20-26 (incl. Beacon antenna with 15 m cable and integral receiver board)
2. Rectifier PR-62
3. 30 m or 50 m GPS antenna cable
4. NMEA cable 20S0093, 5 m
5. Antenna base CP20-01111 (Pipe mount)  
No. 13-QA300 (Deck mount)  
No. 13-QA310 (Offset bracket)  
No. 13-RC5160 (Handrail mount)
6. Flush mount kit OP20-24/25
7. Nav aids data base kit (Future development)



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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