

FURUNO

SATELLITE SPEED LOG



Model:
GS-100

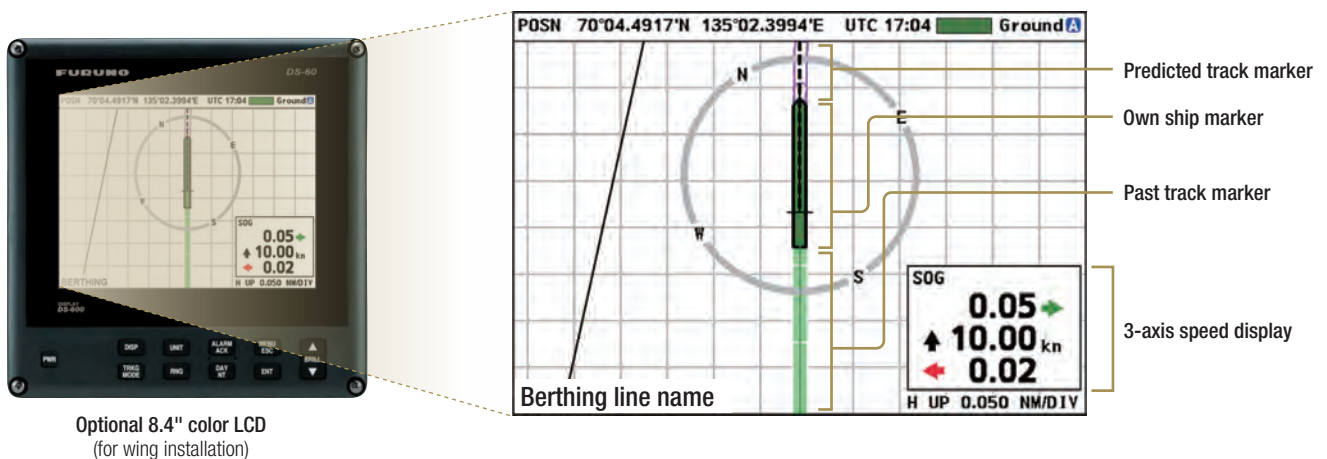
FURUNO satellite speed log GS-100 delivers highly accurate speed measurement for safe berthing and docking operations



- ▶ Offers transverse speed at bow and stern position, as well as longitudinal speed
- ▶ Provides transverse speed at any position of the ship utilizing the built-in satellite compass
- ▶ Delivers roll, pitch and angular information for navigation equipment such as Radar, ECDIS and AIS. Accurate information of ship's attitude contributes to safe and efficient navigation.
- ▶ Fully complies with SDME (Speed and Distance Measuring Device) standard (IEC 61023) and THD (Transmitting Heading Device) standard (ISO 22090-3)
- ▶ 5.7" color LCD
- ▶ Compact antenna unit facilitates ease of installation
- ▶ Simplified menu operation
The operator can navigate through the menu by pressing the cursor or pressing the numeric key associated with the menu items.

Provides speed accuracy of ± 0.02 kn

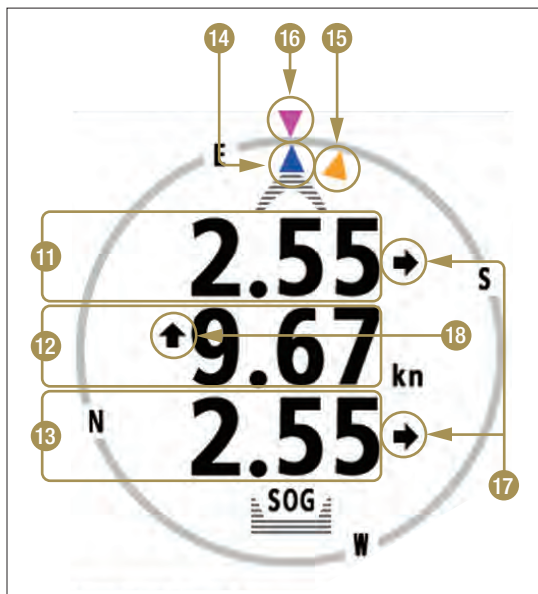
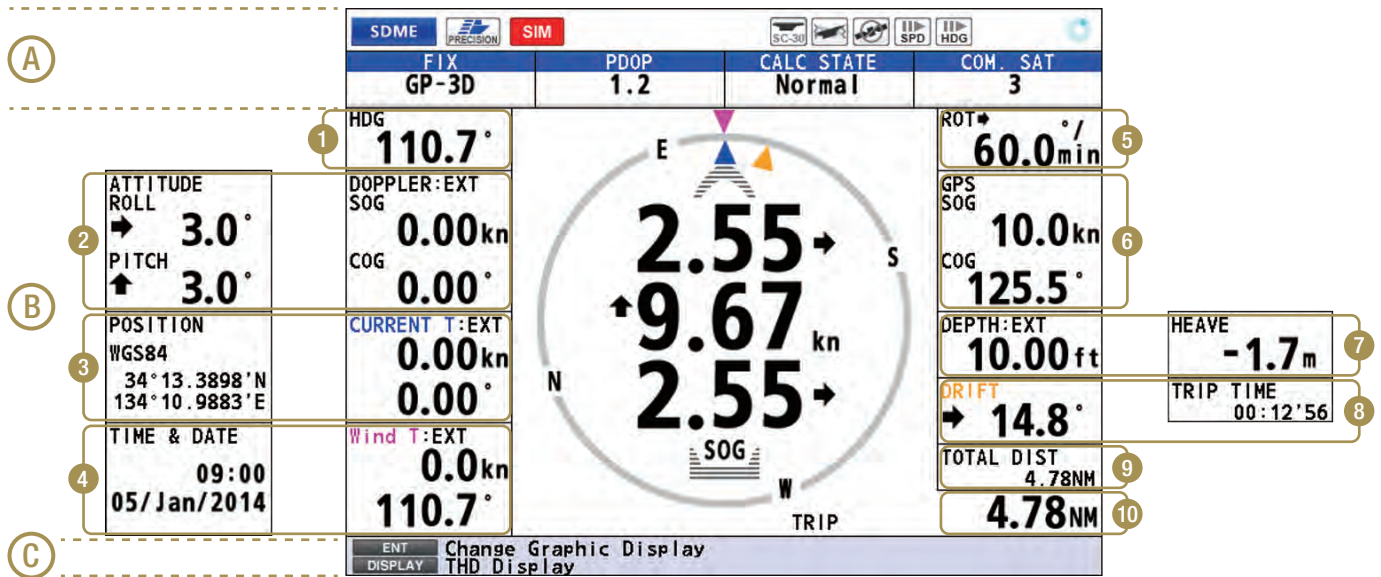
The measurement capability at dead slow speed is vital for precise docking of large ships. The GS-100 offers speed accuracy of ± 0.02 kn, which is of great help during berthing operations. Also, an optional 8.4" color LCD for a wing workstation installation gives high-legibility, real-time information in both graphics and alphanumerics.



MSC.334 (90) Revised carriage requirement for Speed log

- For ships of 50,000 GT and upwards, 2 separate devices, namely one for STW and one for SOG (2-axis) should be provided.
- Applies to ships constructed on or after July 1, 2014

Navigation Display

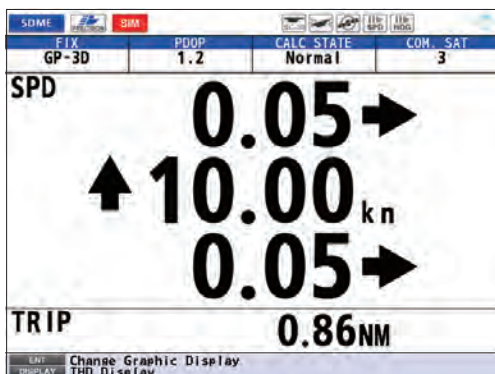


- (A) Current selected mode (SDME or THD), integrity status and common satellite number, etc. are displayed.
- (B) This area shows the information specific to the display mode currently selected. Please refer to each of the display modes for details.
- (C) Guide to currently available actions is displayed. Under an alert situation, the information about the most imminent alert is displayed.

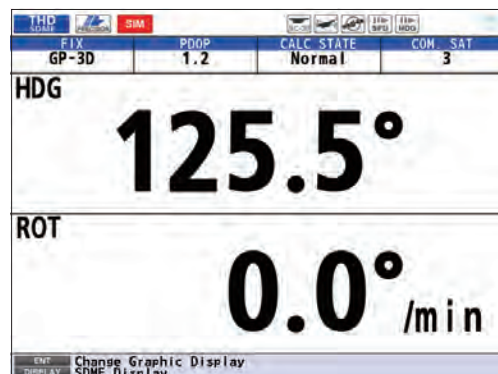
- 1 Heading
- 2 Roll/Pitch or Doppler measured SOG/COG*
- 3 Position or Current speed/direction*
- 4 Time & Date or Wind speed/direction*
- 5 ROT
- 6 GNSS measured SOG/COG
- 7 Heave or Depth*
- 8 Trip time or Drift angle*
- 9 Total distance
- 10 Trip distance
- 11 Transverse speed at bow position
- 12 Longitudinal speed
- 13 Transverse speed at stern
- 14 Current direction*
- 15 Drift angle*
- 16 Wind angle*
- 17 Bow/Stern velocity ←→
- 18 Heading velocity ↑↓

* displayed with connection of appropriate external sensors

Text screen



Speed/Trip



Heading/ROT

SPECIFICATIONS

Product Name	SATELLITE SPEED LOG	
Accuracy	Speed	at Antenna Unit (satellite: more than 5) 0.02 kn RMS
	transverse speed at reference position (satellite: more than 5)	0.08 kn RMS
	satellite: 3 or 4	0.2 kn RMS
Resolution	Trip distance	0.01 NM
	Attitude (Heading/Pitch/Roll)	0.5° RMS
	Speed	0.1 kn or 0.01 kn (selectable)
Follow-up (Heading/Pitch/Roll)	Attitude	0.1° or 0.01° (selectable)
	ROT	0.1° /min or 0.01° /min (selectable)
	Settling time	45° /s
Receive Frequency	90s approx.	
Tracking code	L1: 1575.42 MHz (GPS/Galileo/QZSS), 1602.5625MHz (GLONASS)	
	C/A code (GPS/QZSS), E1B (Galileo), 10F (GLONASS)	
Position Accuracy	GNSS	5m approx. (2 drms, HDOP<4)
	SBAS	4m approx. (2 drms, HDOP<4)
Display Interface	5.7" color LCD	
Interface	IEC 61162-1 IN/OUT	2
	IEC 61162-1 OUT	1
	IEC 61162-2 IN/OUT	1
	Ethernet (IEC 61162-450)	1
	USB (for maintenance)	1
	CAN (spare)	1

POWER SUPPLY

Junction Box	24 VDC: 0.6 A
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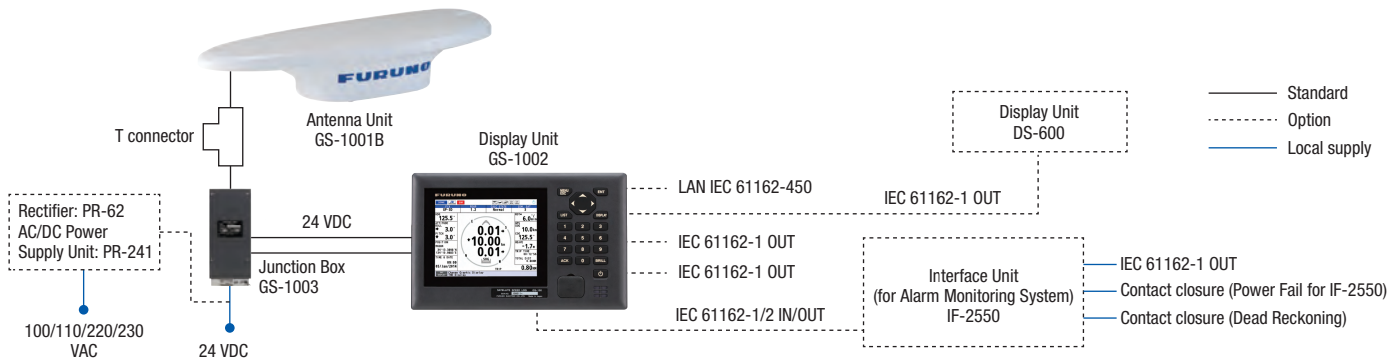
ENVIRONMENT

Ambient Temperature	Antenna	-25°C to +55°C
	Display Unit/Junction Box	-15°C to +55°C
Relative Humidity	95 % or less at 40°C	
Degree of protection	Antenna	IP56
	Display Unit	IP25
	Junction Box	IP22
Vibration	IEC 60945 Ed. 4	

EQUIPMENT LIST

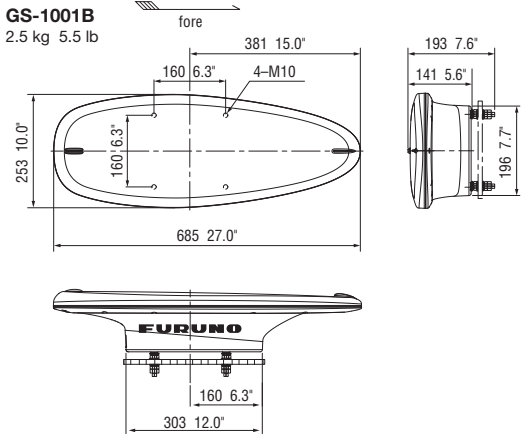
Standard	Option
1. Antenna Unit GS-1001B (-A/N) x1	1. Interface Unit (for Alarm Monitoring System) IF-2550
2. Display Unit GS-1002 x1	2. Display Unit DS-600
3. Junction Box GS-1003 x1	3. Bird-Repellent Fixture OP20-36/37
4. Cable between Antenna Unit and Junction Box x1 for Merchant vessel (30/40/50 m) for Recreational boats or Fishing vessel (15/30 m)	4. Rectifier PR-62/PR-241
5. Cable between Display Unit and Junction Box (for Signal, 6 m) x1	5. Flushmount Kit OP20-40/41
6. Cable between Display Unit and Junction Box (for Power Supply, 6 m) x1	6. Watertight LAN cable (3 m)
7. Serial cable (for IEC 61162-1, 5 m) x1	7. Serial cable (for IEC 61162-1, 5/10/20 m)
8. Installation Materials x1	8. Serial cable (for IEC 61162-2, 5 m)
	9. Cable between Antenna Unit and Junction Box for Merchant vessels (30/40/50 m) for Recreational boats or Fishing vessels (15/30 m)

Interconnection Diagram



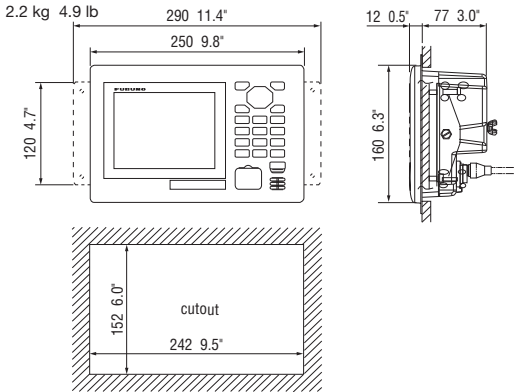
Antenna Unit

GS-1001B
2.5 kg 5.5 lb



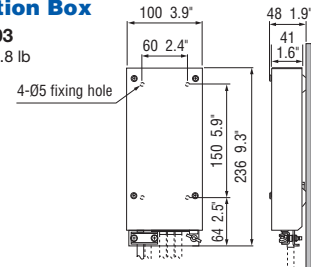
Display Unit

GS-1002
2.2 kg 4.9 lb



Junction Box

GS-1003
0.8 kg 1.8 lb



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