

Marine Speed and Distance Measuring Equipment (SDME)

DOPPLER SPEED LOG

Model **DS-80**

- Speed and distance run indicated on a large illuminated LCD display
- Compact display unit and transducer
- High accuracy by utilizing the Doppler principle, paired beam eliminating effect of pitching, and velocity correction for change of water temperature
- Easy speed correction at mile post run
- Speed output to ARPA, radar, ECDIS, AIS, VDR, GMDSS equipment, etc.
- Complies with IMO standard A.824, IEC 61023 and other related standards

The DS-80 is an SDME (Speed and Distance Measuring Equipment) utilizing the Doppler Effect principle. It complies with the latest IMO, IEC and ISO standards as well as the rules of the classification societies.

Unlike an electromagnetic speed log or other type, this equipment does not require a sensor protruding through the ship hull; this greatly reduces the routine maintenance. Another special feature is the capability to measure own ship speeds at dead slow movement with high accuracy. The pair-beams at 1 MHz sonic frequency ensures accuracy in rough weather.

The primary function is available without any operator action; just keep the power switch on. The user-friendly menu ensures easy adjustment of all functions. Auxiliary functions such as resetting the Distance Run and speed offset are easy on the menu.

Optional analogue and digital remote displays are available to enhance the convenience of navigation. A new transducer was designed with the same dimensions as the existing DS-70 transducer. It may be fitted to the hull directly or with a gate valve.



SPECIFICATION OF DS-80

1. **Measuring System** Paired-beam Doppler log, 1 MHz
2. **Display unit** 4.5" (95 x 60 mm) Monochrome LCD
120 x 64 pixels
Character size: 12 or 23 mm high selectable
3. **Speed Range**
Forward: 0 - 40 kt, 0.1 kt steps
Astern: 0 - 10 kt, 0.1 kt steps
4. **Distance Run** 0-999,999.99 nm, resettable to any value.
5. **Accuracy** Speed through-the-water (STW):
1%, display resolution 0.1 kt
Distance run: 1%, in steps of 0.1 nm
6. **Water Depth** Deeper than 3 m
7. **Correction**
Sound velocity: Automatic correction for change of water temperature
Mile post run: $\pm 10\%$ on menu
8. **Test** -10 and 40 kt
9. **Power Supply** 115/230 VAC
10. **Interface** IEC 61162-1
Output: VBW, VLW

ENVIRONMENT (IEC 60945 test method)

- Temperature** -15 °C to +55 °C (Display unit)
Waterproofing Display unit; IPX5 CFR-46 (USCG)

EQUIPMENT LIST

Standard

- | | |
|---|--------|
| 1. Display Unit DS-800 | 1 unit |
| 2. Transducer unit DS-820 with 10/20/30 m cable | 1 unit |
| 3. Transceiver unit DS-810 | 1 unit |
| 4. Distribution box DS-801 | 1 unit |
| 5. Terminal box DS-802 | 1 unit |

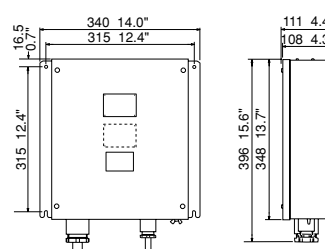
Option

- | | |
|-------------------------------------|--------|
| 1. Digital indicator DS-830 | 1 unit |
| 2. Distance indicator DS-840 | 1 unit |
| 3. Transducer tank DS-850 | 1 unit |
| 4. Flush mount kit F type or S type | 1 unit |
| 5. Gate valve DS-786, DS-782 | 1 unit |
| 6. Junction box CI-630 | 1 unit |

TRANSCEIVER UNIT

DS-810

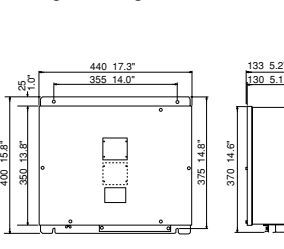
Weight 8.0 kg, 17.6 lb



DISTRIBUTION BOX

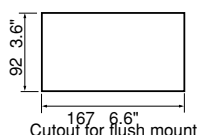
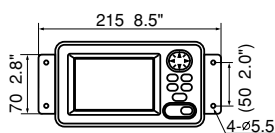
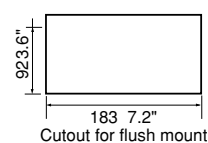
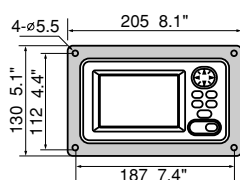
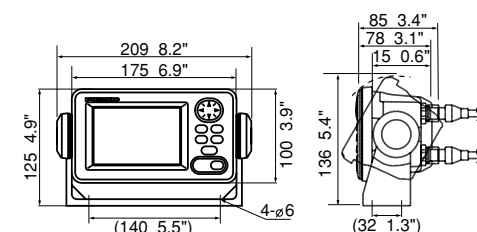
DS-801

Weight 14 kg, 30.9 lb

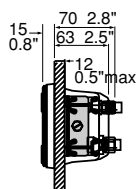


DISPLAY UNIT DS-800

Weight 0.6 kg, 1.3 lb



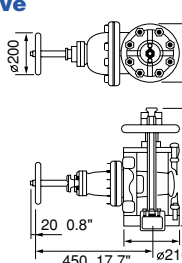
Flush mount kit F-type



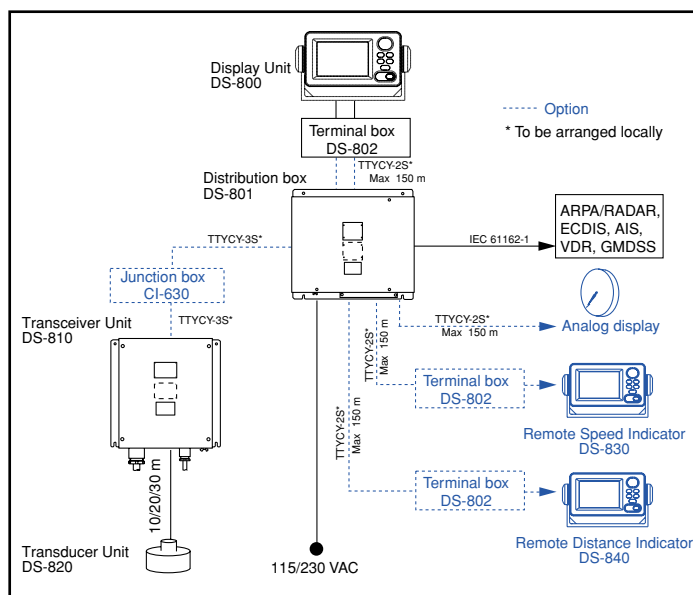
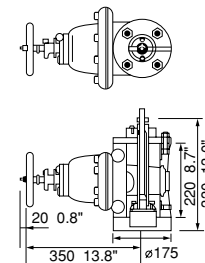
Flush mount kit S-type

Gate Valve

DS-782



DS-786



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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02125Y Printed in Japan