

FURUNO®

DOPPLER SONAR CURRENT INDICATOR

Model **CI-68**

High-performance current indicator displays accurate speed and current data on a 10.4" color TFT or virtually any VGA monitor utilizing the BlackBox system



The future today with FURUNO's electronics technology.

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Catalogue No. M-1530a

TRADE MARK REGISTERED
MARCA REGISTRADA

Obtain highly accurate water current measurement using Furuno's reliable acoustical technology.



The FURUNO CI-68 is a new Doppler Sonar Current Indicator designed for various types of fish and hydrographic survey vessels.

The CI-68 displays tide speed and direction at three depth layers and ship's speed on a high definition 10.4" color LCD. Using this information, you can predict net shape and plan when to throw your net.

The CI-68 has a triple-beam emission system for providing highly accurate current measurement. This system greatly reduces the effects of the rolling, pitching and heaving motions, providing a continuous display of tide information.

When ground (bottom) reference is not available acoustically in deep water, the CI-68 can provide true tide current information by receiving position and speed data from a GPS navigator and heading data from the satellite (GPS) compass SC-60/120 or gyrocompass. In addition, navigation information, including position, course and ship's track, can also be displayed.

The CI-68 consists of a display unit, processor unit and transducer. The control unit and display unit can be installed separately for flexible installation. A BlackBox configuration (without monitor) is also available. CI-60G users can easily upgrade without drydocking to CI-68 since it uses the same transducer as the CI-60G.

- **Compact 3-unit design for ease of installation and maintenance**
- **High definition 10.4" color LCD**
- **Blackbox system configuration allows use of optional CRT or LCD monitors**
- **Continuous display of tide speed and direction at the three depth selected layers**
- **Triple-beam system for less error in tide current detection**
- **True tide current presentation with external GPS navigator and Gyrocompass**

TIDE VECTOR

TEXT



Ship's speed and course

Tide speed/direction

Tide differences



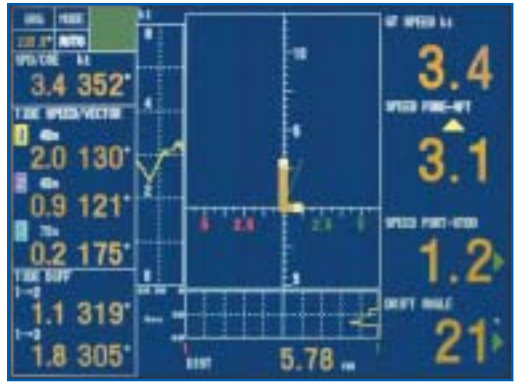
Echo level

Tide vectors for tide differences between Layer 1 and 2, Layer 1 and 3

Tide vectors for speed and direction at Layer 1, 2 and 3

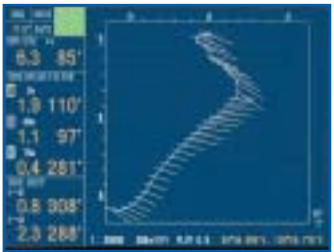
Water temperature (external temp. sensor required)

Tide speed and direction for the three depth layers are displayed with vectors. The depth of each layer can be set manually in 1 m intervals. Other information such as tide differential between the reference and one of the two other layers, heading and course can also be displayed in large text.



SHIP'S SPEED

Displays the speed components for fore-aft and port-stbd. The synthesized vector (green line) intuitively shows drift direction. The speed source is selectable on the menu from ground tracking or water tracking.

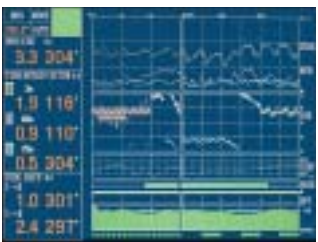


TRACK

Tide vectors can be shown on the ship's track in user specified intervals.

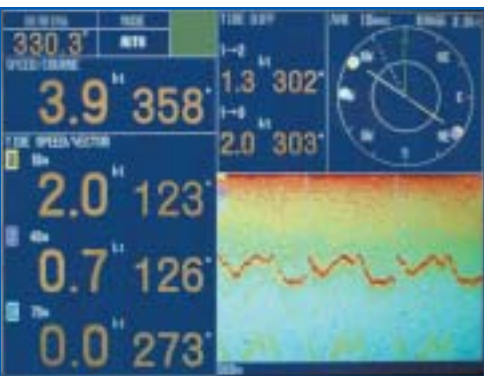
TIDE LOG

Displays the tide information over the past twelve hours.



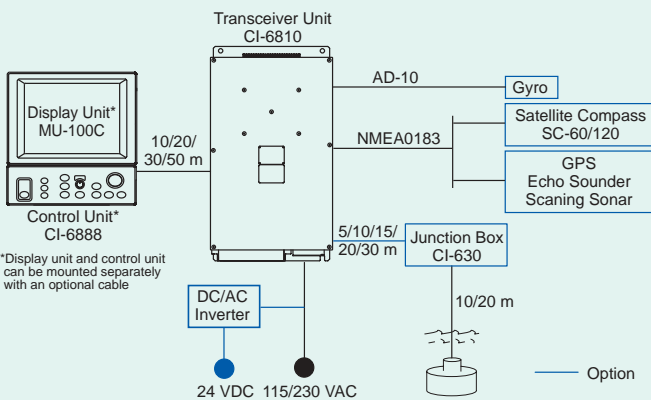
ECHO LEVEL

Displays echogram obtained from each beam. It helps evaluate the concentration or distribution of fish school or seabed at three directions simultaneously.

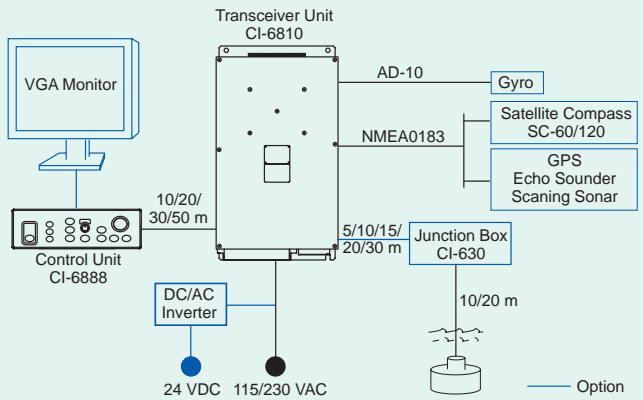


INTERCONNECTION DIAGRAM

Standard configuration (with standard LCD monitor)



BlackBox configuration (with custom monitor)



*Display unit and control unit can be mounted separately with an optional cable

SPECIFICATIONS OF CI-68

Display

10.4" TFT color LCD, 640 x 480 pixels

Measurements

Current

Speed: 0 to 9.9 kt
 Direction: 360°
 Number of layers: 3 layers

Ship

Speed: -10 to 30 kt (fore-aft)
 -9.9 to +9.9 kt (port-starboard)
 Direction: 360°

Depth Range

For current measurement

2 to 75% of water depth up to 150 m
 (Over 22 m of water depth is required in Ground tracking mode. Over 40 m water depth is required in Water Tracking mode)

For ground tracking

2 to 300 m

Accuracy

Current: ± 2% of ship's speed + 0.2 kt
 Ship's speed: ± 1% + 0.1 kt

Number of Beams

Three beams

Tilt

75° each

System Frequency

244 kHz

Data Interface (NMEA 0183 Ver.1.5/2.0/3.0, IEC 61162)

Inputs:

DBT, DPT (Depth), GGA, GLL, RMA, RMC (L/L),
 HDG, HDM, HDT (Compass), MTW (Water temperature),
 VTG (SOG, COG), ZDA (UTC)

Outputs:

CUR (Water current layer), VBW (Dual Ground/Water Speed), VDR (Set and Drift), VHW (Water speed and heading), VLW (Distance travelled through the water), VTG (SOG, COG)

POWER SUPPLY (IEC 60945 test method)

Temperature Display Unit: -15° to +55°
 Control Unit: -15° to +55°
 Transceiver Unit: -15° to +55°

Waterproofing Display Unit: IPX0 (IEC 60529)
 Control Unit: IPX2 (IEC 60529)
 Transceiver Unit: IPX0 (IEC 60529)

POWER SUPPLY

115/230 VAC

EQUIPMENT LIST

Standard

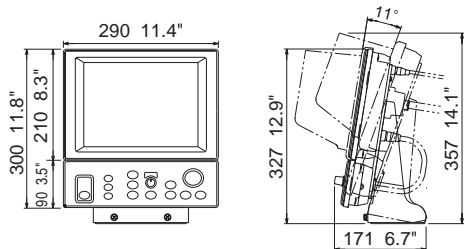
- | | |
|--|--------|
| 1. Display/Control Unit MU-100C/CI-6888 | 1 unit |
| 2. Transceiver Unit CI-6810 | 1 unit |
| 3. Transducer CI-620-1-68 with 10 m cable or CI-620-2-68 with 20 m cable (Specify when ordering) | 1 unit |
| 4. Transducer Tank CI-620-T-S (for Steel hull) | 1 unit |
| 5. Through-hull Pipe CI-620-K-S (for Steel hull) | 1 unit |
| 6. Installation materials and spare parts | 1 set |

Option

- Junction Box CI-630
- DC/AC Inverter TR-2451 for 24 VDC mains
- Transducer Tank CI-620-T-F (for FRP hull)
- Through-hull Pipe CI-620-K-F (for FRP hull)
- Cable for Transceiver - Junction box Z-6FUNV-SX-C 3P+1P, 5/10/15/20/30 m
- Cable for Display - Control Unit 66S1249-0, 5/10 m

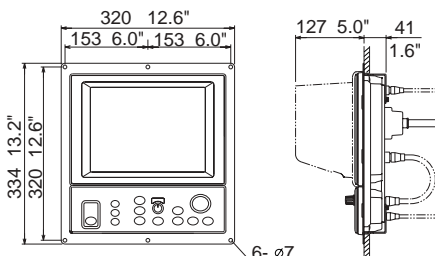
Display/Control Unit

MU-100C/CI-6888 5.7 kg, 12.6 lb



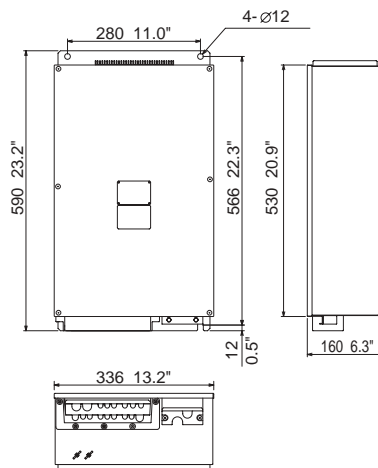
Flush Mount Type

4.2 kg, 9.3 lb



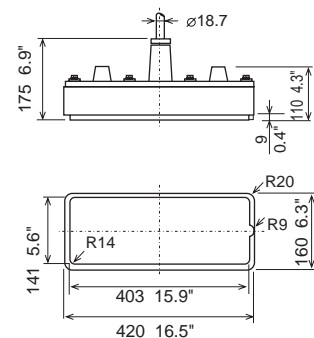
Transceiver Unit

CI-6810 17.0 kg, 37.5 lb



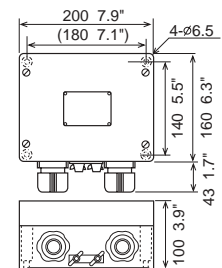
Transducer

CI-620-1-68 with 10 m cable 21 kg, 46.3 lb
 CI-620-2-68 with 20 m cable 26 kg, 57.3 lb



Junction Box

CI-630 2.0 kg, 4.4 lb



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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