

## DeepSea World

General Catalog

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# Our mission

Bringing together the most advanced navigational sensors and communications technology, Furuno provides the ability to create and implement optimal shipping methods and routes that consider safety, environmental and economic factors for long voyages.

### A wide range of products for safer navigation

For safe and efficient navigation, Furuno provides a wide range of innovative radio-communications and radio-navigation equipment, complying with IMO, ITU, IEC, ISO and other relevant standards.

### Innovative solutions, ahead of their time

The integration of the navigational equipment with new technologies, such as Augmented Reality, creates a brand-new experience in ship maneuvering. Furuno strives to respond to our customer's needs by incorporating the best of our knowledge and technological know-how into new products and services.

### Worldwide service network

You will never be without spare parts and technical backup thanks to our worldwide service network, supported by Furuno's Continental Service Centers. Our experienced engineers perform the necessary technical service and support to remedy any situation.





## The most comprehensive bridge system (INS Type Approval)

FURUNO VOYAGER, FURUNO's unique bridge system, has been designed using our decades of expertise in sensor technology, network integration and software development. FURUNO VOYAGER bridge system offers multifunction workstations with seamless display of Radar/Chart Radar, ECDIS, Conning and Alert Management System data. FURUNO VOYAGER bridge system has been developed with an intuitive user interface and conforming to INS type approval and relevant class rules.

Total network sensor integration delivers situational awareness to the mariner. An uncomplicated display presentation simplifies and streamlines navigational tasks. Common responsibilities such as route planning, navigation status monitoring, log-keeping, alert awareness and day-to-day chart management are made easy through common workstation layout and redundancy of display and controls. Watchstanders will enjoy reduced workload and significant freedom to move about the bridge, with all necessary information available in a variety of displays and locations.

Furthermore, the AMS/Conning display is beautifully designed to show all essential navigational data on a single, comprehensive display. We place great importance on delivering crucial data to mariners in a clear and concise manner.



#### Model: FMD-3005 (27" wide LCD)

Displays official Electronic Navigational Charts (ENC) S-57 Edition, Raster Navigational Chart (RNC). A Radar image, tracked targets and AIS data with the chart can be overlaid on the charts on ECDIS when conducting route planning and route monitoring. TCS certified.



Model: FMD-3005



#### Model: FAR-30x5 Series (27" wide LCD)

Featuring total integration of Radar and ENC Display System, FURUNO Chart Radar series display the Radar images together with ENC at the same time.



Model: **FAR-23x8** (27" wide LCD) Model: **FAR-15x8** (15" LCD)

The latest digital signal processing technology and highly receptive antenna enables the Radar series to detect targets and show echoes with crisp images on your monitor, whether ships are moving fast around your vessel or located miles away.





The NEW Voyage Planning System that allows you to experience unparalleled comfort in navigation planning and monitoring. Features include route creation, ship speed calculations, and situational awareness with overlaid radar, AIS, and weather information, and much more.

▶ Wave Analysis option (WV-100/100ST) is available for model FAR-2xx8 series or FAR-30x5 series. This function displays wave information (height, direction, period, etc.) on the screen, useful for safely navigating.

- Unique Ice Detection Mode (option) is available for model FAR-15x8, FAR-2xx8 or FAR-30x5 series X-band navigational Radar. The Ice Detection mode is capable of finding the best route through icy waters. It removes image noise and the fine structures of the ice will become more visible.
- Oil Spill Detection Mode (option) is available for model FAR-15x8, FAR-2xx8 or FAR-30x5 series X-band navigational Radar. The oil Spill Detection Mode detects oil spills automatically and creates a polygon to mark the spill. This mode was developed with the aim of contributing to the protection of environment and marine life by detecting oil spills on the sea surface.



Model: FAR-30x5 Series



Model: FAR-23x8 Series



# Navigation Equipment



#### Model: FE-800

The FE-800 displays the clearance below ship in the dual frequency operation (50/200 kHz), when interfaced with two transducers. The depth at the fore and aft positions can be displayed simultaneously.





#### Optional Printer: PP-900 \*Interface Unit IF-2550 Required



#### Model: GP-170

The GNSS navigator GP-170 is an ideal position sensor for Radar, AIS, ECDIS, Autopilot, Echo Sounder and other navigation and communications equipment. Newly designed GPS chip and antenna unit deliver enhanced stability and precision in position fixing.

GP-170 will be compatible with the GLONASS satellite system.



#### Model: FA-170

The FA-170 enhances the safety and efficiency in navigation by automatically exchanging navigational status and other safety-related information within the VHF coverage.

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## Doppler Sonar

#### Model: DS-60

The DS-60 is the SDME which outputs the information especially required for berthing and docking operation of vessels. It offers 3 display modes: 3-axis speed, berthing and NAV data. Independent STW and SOG sensors are required for 50,000 GT vessels.



#### Model: DS-85

The DS-85 indicates speed and distance on a large illuminated LCD. New transducer is resistant to air bubbles in the water, providing more stable and reliable data. Required for vessels over 300 GT.

# SATELLITE SPEED LOG

### Model: GS-100

The measurement capability at dead slow speed is vital for precise docking of large ships. The GS-100 is the SDME and offers speed accuracy of  $\pm 0.02$  kn, which is of great help during berthing operations.









#### Model: VR-7000/VR-7000S

The VR-7000/7000S record the navigation data and assist investigators in identifying the causes of maritime casualty as well as to use the data for future reference to further incident prevention.

By connecting VR-7000/7000S installed on the ship to a PC on the land via satellite connection, data can be replayed or extracted.



#### Model: BR-500

The purpose of BNWAS (Bridge Navigational Watch Alarm System) is to monitor bridge activity and detect operator disability which could lead to marine accidents.





#### Model: SC-70/SC-130

The SC-70/130 are the latest generation of GPS compasses and increase the accuracy of other instruments, such as Radar, ECDIS, AIS, Doppler Sonar and Autopilots.

The SC-70/130 comply with IMO standards regarding THD and GPS.



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VOR EPIRB





#### Model: RD-20/RD-50

The RD-20/RD-50 display data from onboard sensors. The displays are switched by a remote controller and display brilliance of all units can be centrally controlled from one dimmer unit.





Model: RD-20 (144mm x 144mm)

Model: RD-50 (240mm x 240mm)

# **Communication Equipment**

## Gmoss Console

### Model: RC-1800F2

The RC-1800F2 is a quality radio communications console, containing all the necessary radio equipment for ships operating in the GMDSS sea areas A2<sub>7</sub>3.

# $\mathcal{U}_{HF}$

#### Model: FM-8900S

The FM-8900S is designed to comply with the GMDSS carriage requirements. All the necessary facilities such as a Class A DSC modem and a CH 70 watch receiver are included in the transceiver unit.



# M=/H=

### Model: FS-1575/FS-2575

In addition to MF/HF marine telephony communication facility, the FS-1575/2575 is equipped with DSC plus DSC Watch Receiver capability on all distress and safety frequencies in MF and HF bands. NBDP facility is optionally available.

FS-1575 (150 W pep), FS-2575 (250 W pep)



#### Model: **NX-900**

The NX-900 can receive the NAVTEX messages on 518 kHz and 490 kHz or 4209.5 kHz at the same time.



Model: NX-900 (display with a PP-900 printer)



### Model: FELCOM18 (SSAS and LRIT compatible)

The FELCOM18 delivers full coverage of Inmarsat-C services: EGC reception (GMDSS), Inmarsat E-mail, distress message handling, polling, and data reporting. Additionally, the FELCOM18 is compatible with LRIT application and SSAS with optional SSAS alert unit.





#### Model: FELCOM19 (SSAS and LRIT compatible)

The FELCOM19 is a wide variety of communication schemes available: EGC reception (non-GMDSS), Inmarsat E-mail, distress message handling, polling, and data reporting.

Additionally, the FELCOM19 is compatible with LRIT application and SSAS with optional SSAS alert unit.



#### Model: **IC-350**

The IC-350 is the centralized control of distress alerting of connected GMDSS equipment. It is required for all passenger ships engaged in international voyage to equip collective alerting controller system. All audio alarms can be halted with a single press of the "Mute Alarm" button.





#### Model: FAX-30/FAX-410

The FAX-30 automatically receives high quality weather maps and satellite images and displays them on an interfaced PC screen. The FAX-410 prints the images on a sheet of 10" paper by a thermal printing mechanism.





Model: FAX-30

Model: FAX-410





SafeComNet<sup>™</sup>- FURUNO Mobile Satellite Services covers scalable satellite communication packages and onboard network infrastructure for safe and effcient fleet operation.



#### Model: FELCOM251/501

FELCOM251 and FELCOM501 are FURUNO's latest Inmarsat FleetBroadband terminals, delivering ship-to-shore/ship-to-ship broadband communication of up to 432 kbps, anywhere at sea, by utilising the Inmarsat Fleet Xpress system coverage.





#### Model: FV-60GX/110GX and FELCOM251/501

Fleet Xpress is the system which is composed of Inmarsat Global Express (Ka-band antenna) and Inmarsat Fleet Broadband (L-band antenna). By using properly Ka-band antenna and L-band antenna, Fleet Express implement communication performance of both safty and high speed.



## Driving the Digitalization of Navigation



FURUNO ENVISION A revolutionary solution Designed for the future of navigation

### **AR Navigation System**

Beyond Reality

FURUNO ENVISION'S AR Navigation System (Model:AR-100M) is our all-new advanced augmented reality navigation system that provides substantial support to navigation, using the power of AR to go beyond reality. Thanks to a camera pointed forward of the vessel, an image of the front

view projects on a display and all the necessary navigation information is superimposed over this live video imagery by our AR technology.

The unique graphic user interface of AR Navigation System reduces workload and stress from watch duties, while intuitive readings help contribute to safety of navigation by enhancing situational awareness.



%AR navigation is an auxiliary tool designed to improve the navigation comfort for safer navigation. In no case should AR navigation replace Radar, ECDIS etc. and other required instruments for danger avoidance.

Beware of similar products

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