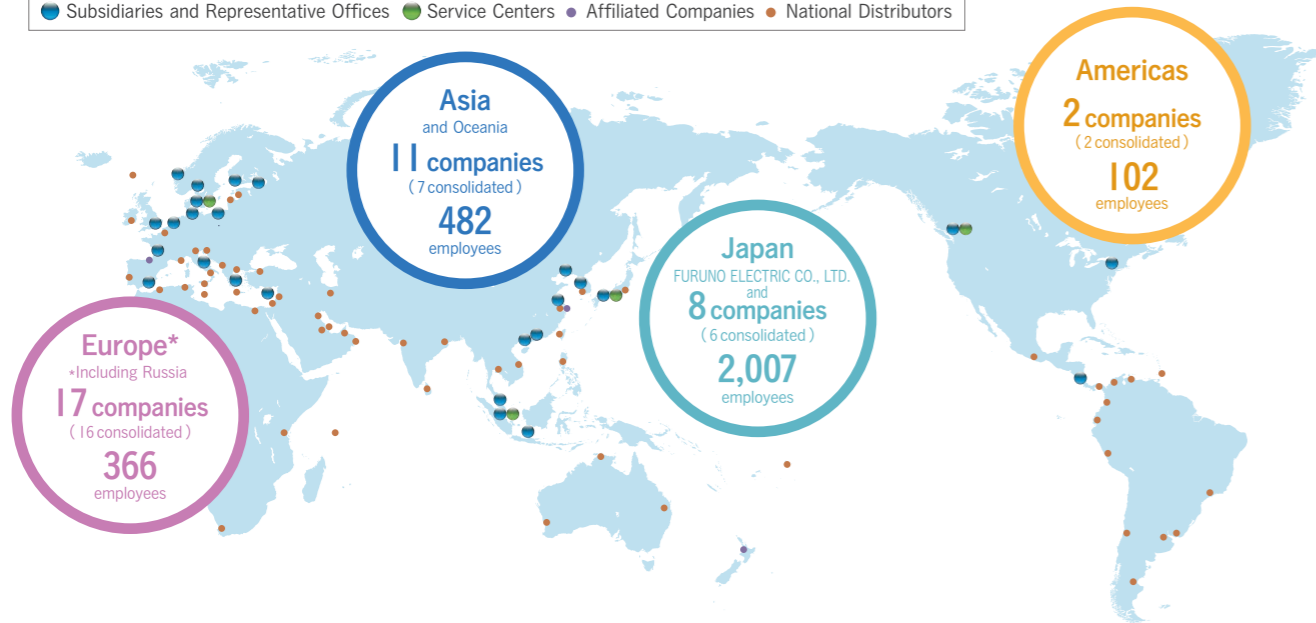


# Global Network / Corporate Information (as of March 1, 2019)

● Subsidiaries and Representative Offices ● Service Centers ● Affiliated Companies ● National Distributors



## Europe

FURUNO (UK) LTD.  
FURUNO NORGE A/S  
FURUNO DANMARK A/S  
FURUNO SVERIGE AB  
FURUNO FINLAND OY  
FURUNO POLSKA Sp. z o.o.  
FURUNO DEUTSCHLAND GmbH  
FURUNO EUROPE B.V.  
FURUNO FRANCE S.A.S.  
FURUNO ESPAÑA S.A.  
FURUNO ITALIA S.R.L.  
FURUNO HELLAS S.A.  
FURUNO (CYPRUS) LTD  
FURUNO EURUS LLC

## Japan

FURUNO KYUSHU HANBAI CO., LTD.  
FURUNO KANSAI HANBAI CO., LTD.  
KYORITSU RADIO SERVICE CO., LTD.  
FURUNO SYSTEMS CO., LTD.  
FURUNO LIFEBEST CO., LTD.  
FURUNO SOFTECH CO., LTD.  
LABOTECH INTERNATIONAL CO., LTD.

## Asia

FURUNO SHANGHAI CO., LTD.  
FURUNO SOFTECH (DALIAN) CO., LTD.  
FUNOTEC (DALIAN) CO., LTD.  
FURUNO CHINA CO., LTD.  
FURUNO HONG KONG CO., LTD.  
PT FURUNO ELECTRIC INDONESIA  
FURUNO KOREA CO., LTD.  
FURUNO SINGAPORE PTE LTD  
FURUNO ELECTRIC (MALAYSIA) SDN. BHD.

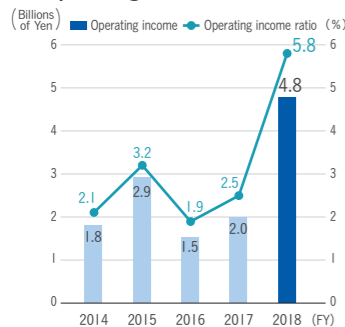
## Americas

FURUNO U.S.A., INC.  
FURUNO PANAMA, S.A.

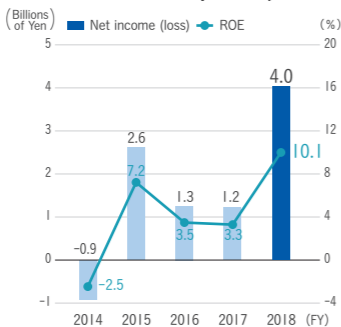
## Financial Highlights (Consolidated)

Years ended the last day of February

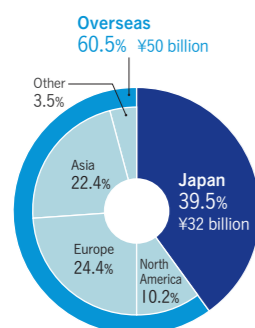
### Operating income / Operating income ratio



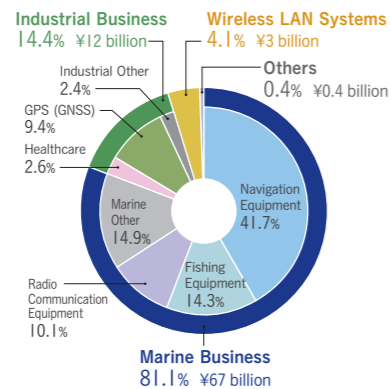
### Net income (loss) attributable to owners of the parent / ROE



### Net sales by region



### Net sales by business



## Company Outline

(as of February 28, 2019)

Company Name	FURUNO ELECTRIC CO., LTD.
Incorporated	May 23, 1951
Headquarters	9-52 Ashihara-cho, Nishinomiya City, Hyogo 662-8580, Japan
Capital	¥7,534 million
Number of Employees	2,957 (consolidated)
Consolidated Sales	¥82,108 million (\$742.1 million)*
President	Yukio Furuno
Website	<a href="https://www.furuno.com">https://www.furuno.com</a>

\*U.S. dollar amounts are translated, for convenience only, at U.S.\$1=¥110.65, the approximate exchange rate prevailing on February 28, 2019.

The information in this pamphlet is current as of June 1, 2019.  
All brand and product names are registered trademarks, trademarks or service marks of their respective holders.

Catalog No. CA000001314

# FURUNO

CHALLENGE  
the  
INVISIBLE.

## Corporate Report

### 2019 - 2020

Corporate Profile & CSR Report

FURUNO ELECTRIC CO., LTD.

Since our inception, FURUNO has been continually helping people see things that are beyond the realm of visibility. Through exhaustive research and development, we create and implement our innovative technologies to solve any problem, seen or unseen. This mentality resulted in our invention of the world's first fish finder.

However, the products FURUNO manufactures go far beyond making things visible.

By making the invisible visible, we encounter new possibilities that we weren't aware of before. This not only benefits those who directly use our instruments, but it also affects the lifestyles of many people beyond them.

By looking at things from a customer's point of view, we can see the problems at hand and find new possibilities that were previously beyond the realm of visibility.

And by analyzing the way we live, FURUNO continues to create new values that are not yet visible to the human eye.

# CHALLENGE the INVISIBLE.

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- 03 FURUNO's History
- 05 FURUNO's Business Fields (1) Marine Business
- 09 FURUNO's Business Fields (2) Industrial Business
- 13 CSR Initiatives
- 13 Consideration for Our Customers
- 14 Working with Suppliers
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- 15 Global Network / Corporate Information

### ■ Editorial Policy

This report was edited to combine the FURUNO Group Corporate Profile and CSR Report to make the group's business activities easy to understand. The CSR Report summarizes efforts toward society, governance and environment.

### ■ Period Covered

March 1, 2018 – February 28, 2019  
(some content from March 2019 onward also included)

### ■ Scope

This report covers the activities of FURUNO Group companies, primarily those of FURUNO ELECTRIC CO., LTD. The environmental report primarily covers the environmental activities of the ISO 14001-certified Headquarters, Miki Factory, and FURUNO INT Center.

## PRESIDENT'S MESSAGE

### Celebrating 70 Years by Building a Foundation for Growth

FURUNO ELECTRIC CO., LTD. (FURUNO) was the first company in the world to successfully commercialize a fish finder in 1948. For more than 70 years since that time, we have contributed to the progress of society and industry by offering cutting-edge, innovative electronic devices that serve our customers' needs. The FURUNO Group's management philosophy is based on three universal values: "A company exists to serve society", "Its management must be creative", and "The happiness of its employees comes with the growth of a company". Also, The Group's employees aim to embody four professional principles: "Face the future", "Strive to be the best", "Be persistently original", and "Be sincere".

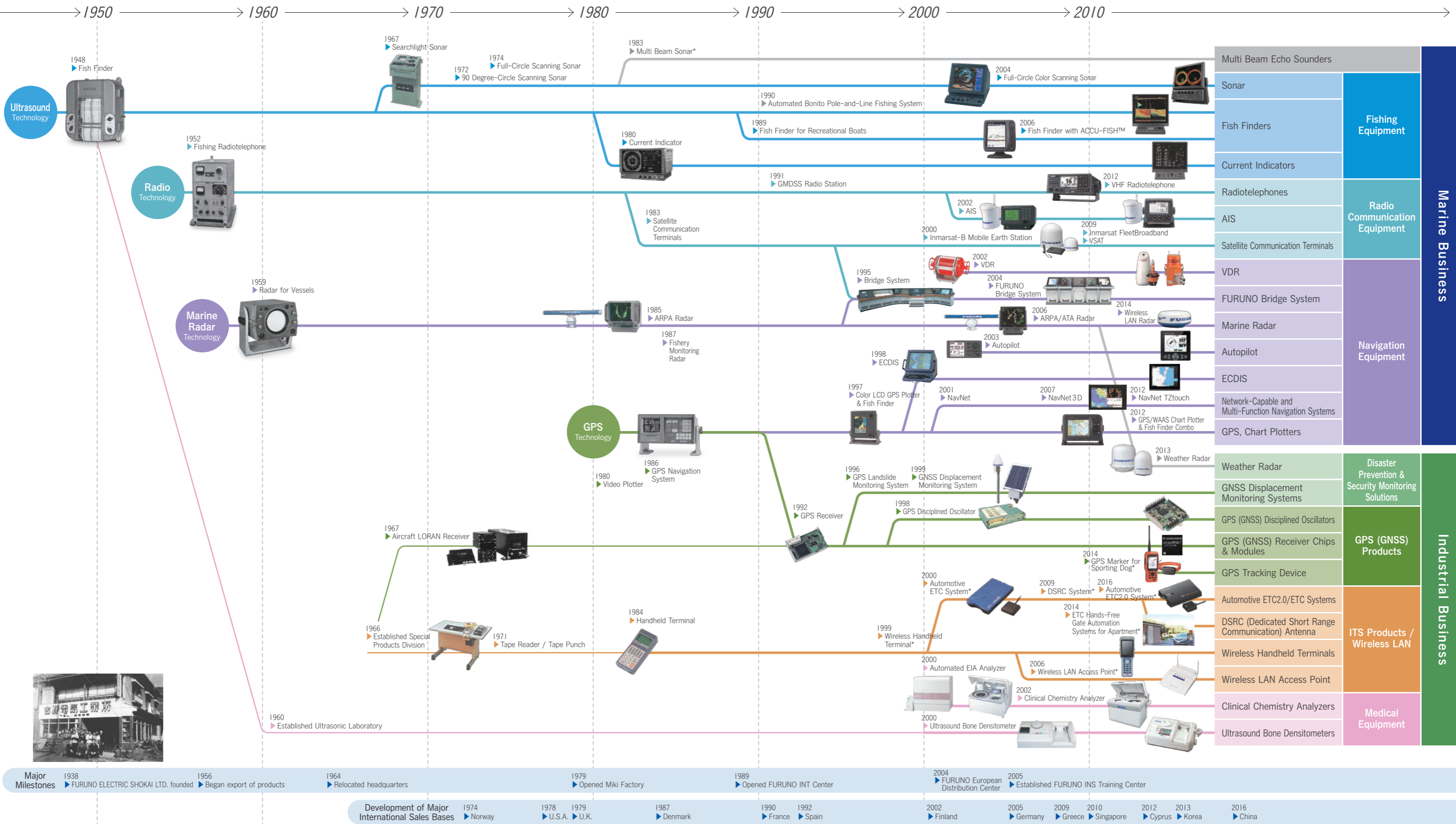
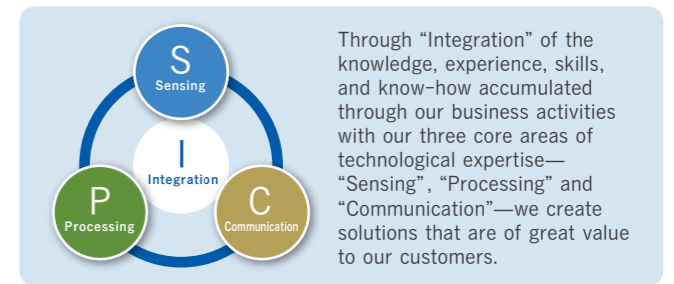
In addition to these universal values, the FURUNO Group has formulated a new management vision, FURUNO GLOBAL VISION "NAVI NEXT 2030", to carry the company through to 2030. This overarching vision relates not only directly to how we conduct our business, but also to our human resources and corporate culture in ways that will guide us toward 2030. We are committed to raising both customer and corporate value through various sustainable and wide-ranging initiatives to achieve this vision.



President *Yukio Furuno*

FURUNO will contribute to the development of society and industry previously invisible, using our SPC core competencies and our

by giving visual form to that accumulated know-how.



\*Japan market only

# Marine Business

## FURUNO equipment supports safe, worry-free navigation.

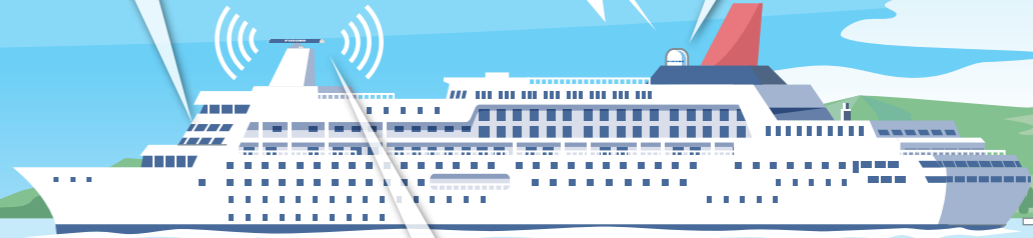
Since successfully commercializing the world's first fish finder in 1948, FURUNO has met customer needs by developing and marketing various types of navigation and communications equipment. Today, we offer equipment to ensure safety, peace of mind, and higher efficiency for a wide variety of ships, from large merchant vessels, to fishing boats and recreational boats.

**Merchant**

**VDR (Voyage Data Recorder)**  
VDR records and stores navigation data and information. This data is obtained from onboard sensors, and can be analyzed in the event of a marine accident to pinpoint the cause and prevent further recurrence.

**Merchant Fishing Recreational Government**

**Satellite Communications Equipment / Service**  
We offer communications equipment and services employing communications satellites. This enables telephone and facsimile communication with the shore, as well as onboard connectivity to the Internet.



**Merchant Fishing Recreational Government**

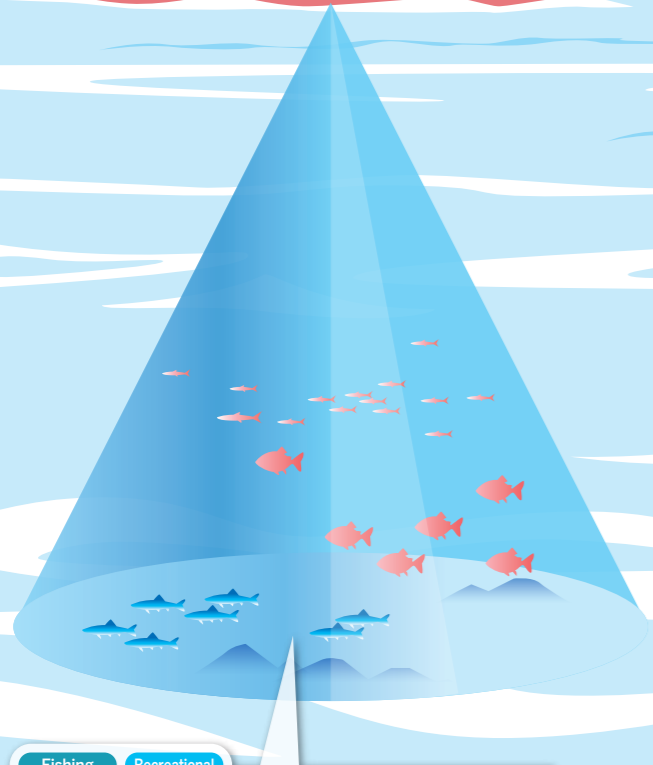
**AIS (Automatic Identification System)**  
AIS allows for ship information (e.g., ID, position, heading direction) to be exchanged among ocean-going ships and vessels. These systems help prevent collisions and ensure safe navigation. They also make it possible to detect ships, which do not appear on radar because they are hidden in the shadow of islands.

**Merchant Fishing Recreational Government**

**Radar**  
Radar acts as the eyes of a ship, sending out radio waves as a means of detecting other vessels and obstructions in the surrounding area. Radar allows ships to navigate safely, even when dense fog reduces visibility.

**Fishing Government**

**Coastal Monitoring System**  
These systems monitor the sea and harbor by combining surveillance radar, surveillance cameras and other equipment. They support a broad array of applications, from wide-range surveillance for marine traffic control, to surveillance over a limited range such as fishing grounds and aquaculture areas.



**Recreational**

**Autopilot**  
Linked to the steering system and heading sensors, the autopilot automatically controls the ship to maintain the course, making steering much easier for the captain.

**Merchant Fishing Recreational Government**

**GPS, Chart Plotter**  
Navigating in the open seas requires accurate assessment of one's current position. GPS chart plotters pinpoint a vessel's position based on radio waves sent from GPS satellites. The position is displayed on a simplified navigational chart.

**Fishing Recreational**

**Fish Finder / Sonar**  
These systems detect fish schools using ultrasound waves, which travel in straight lines as they penetrate the water and bounce back to the original source after hitting fish, the seabed or other objects. The depth and distance to schools of fish can be calculated based on the time it takes for the ultrasound waves to return.

**Fishing Recreational Government**

**Radiotelephone**  
A means of communication while at sea, used in times of distress or emergency and to receive maritime safety information (navigation warnings, weather information, etc.)



**For Merchant Vessels**



**For safe and efficient navigation**

As part of our mission to contribute to safe and efficient navigation, FURUNO offers a variety of navigation and communications equipment. These products are designed for all types and sizes of merchant vessels, carrying both people and goods. With regards to newly-built vessels, we have built up a track record and global network commensurate with our top market share. Leveraging these assets, our business spans from new vessel construction to upkeep and lifecycle maintenance and retrofitting.

**For Fishing Vessels**



**For safe fishing and sustainable use of fishery resources**

Since our founding, FURUNO has offered electronic fishing equipment to modernize and improve the efficiency of commercial fishing. FURUNO is working to develop fisheries with resource management, through the fishery consulting capability that we have previously cultivated in countries around the world, and by providing products and services that are both innovative and optimally suited for the market.

**For Recreational Boats & Small Workboats**



**For safe and comfortable life at sea**

FURUNO offers high-quality products for users of all types of recreational boats, including sport fishing boats, sailboats and yachts. While continuing to supply innovative and highly reliable products to the users of small workboats, such as coastal security vessels and tug boats, we are expanding our efforts to enhance customer value.



**Marine Radar**  
Detects nearby vessels or obstructions using radio waves. Among many features that support safe navigation, our latest marine radar products automatically eliminate unwanted echoes and adjust the radar images according to sea conditions.  
(Model FAR-23x8 series)



(Model FMD-3100 / 3200 / 3300)

**ECDIS (Electronic Chart Display and Information System)**

This system supports course planning and navigation monitoring. The FURUNO ECDIS allows for smooth display switching between information from various types of equipment connected to the network. It contributes to safer and more efficient navigation by realizing natural operation based on an intuitive understanding of current conditions.



(Model FV-110)

**Inmarsat**

This system provides high-speed broadband communication while at sea anywhere in the world. In addition to operational communications, it contributes significantly to crew welfare by allowing communication with their families.



(Model FCV-1900B)

**Hi-Res TruEcho CHIRP Fish Finder**

Displays images in high resolution at various detection depths. This allows you to accomplish previously difficult functions such as detecting fish schools in shallow seas, as well as identifying individual fish swimming in tightly packed schools, which makes for easy identification of fish shadows.



(Model CH-600)

**Dual-Frequency Searchlight Sonar**

Find fish at distance and in a full 360° circle around your own ship. The system features an optimal display for distinguishing schools of small fish such as sardines and whitebait for efficient fishing.



(Model FM-4800)

**Radiotelephone**

This system supports safe and efficient operations with communication capabilities for transmitting and receiving not only voice communication, but also data. It also has a unit for ascertaining the real-time position of other vessels in addition to one's own vessel.



(Model TZT2BB)

**Multi-Function Display**

This device integrates everything needed for navigation at sea. It is equipped with a touchscreen that provides easy intuitive operation by using a single finger. Plotter and radar screen operations can also be performed at will.



(Model GP-1971F)

**GPS/WAAS Chart Plotter**

Fish finder with GPS navigation. Shows bathymetry chart on screen to check your own position and course as you enjoy fishing.



(Model DRS6A-NXT / DRS4D-NXT)

**Solid State Doppler Radar**

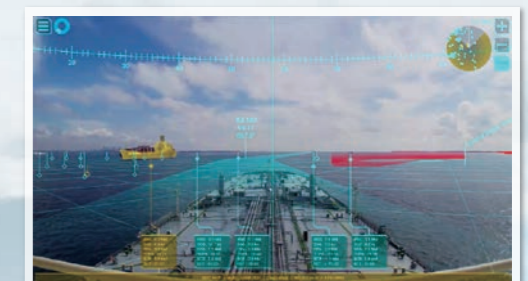
This radar not only detects vessels in the vicinity, but also identifies birds and rain clouds. Obstructions that are approaching your own vessel are automatically displayed in a different color to support safe navigation.

**TOPICS | Augmented Reality Navigation — Introducing the Next Generation of Navigation Systems**

The FURUNO AR Navigation system is our all-new advanced "AR Navigation System" (Augmented Reality Navigation System) that provides an advanced navigation support tool, using the power of the augmented reality.

Thanks to a camera installed at the bow of the vessel, an image of the forward view projects on a display and all the necessary information for navigation is superimposed over this live video imagery by our AR technology.

Even in adverse weather or poor visibility conditions, you can clearly view other vessels' routes and critical information, as well as own ship data, allowing you stress-free maneuvering and navigation. This very intuitive way to display and share information between the captain and the bridge team provides enhanced situational awareness, crew confidence, watchman support, and allows for safer operations.



Display image of the AR Navigation system. Azimuth, AIS, Own ship position, ship speed, and other information such as the route and waypoints are superimposed over the live video imagery.



**FURUNO**

Business Fields II

# Industrial Business

## FURUNO products are at work in many areas of daily life.

Based on technology developed for marine electronic equipment, FURUNO has expanded into new fields, including medical equipment and ICT devices, such as GPS and ITS (intelligent transportation systems) products. Our aim is to achieve better safety, security and comfort to bring about a society that considers the needs of people and the environment.

GPS / ITS

### GPS (GNSS) Disciplined Oscillator

Receiving GNSS satellite signals, these devices generate a high-precision reference frequency and a 1-second pulse accurately synchronized with UTC (Coordinated Universal Time). They are utilized in mobile phone base stations and broadcast relay stations for terrestrial digital TV.

Wireless LAN

### Wireless Handheld Terminal

These terminals are for central management of information and work support using a wireless LAN system. They make various kinds of work quicker and more efficient through real-time management of work status and product data at distribution warehouses, shopping centers, production sites and elsewhere.



Wireless LAN

### Wireless LAN Access Point

These devices create an environment enabling wireless use of the Internet, at locations such as train stations, cafés and hotels. They allow connection to the Internet regardless of mobile carrier, resulting in growing demand at educational facilities, such as schools and private tutoring schools, as well as at hotels, tourist spots and other areas that attract tourists.



Disaster/Security Monitoring

### Meteorological Monitoring and Analyzing System

As an application of small marine radar, we offer compact, low-cost weather radar, which can be installed at multiple locations. The system observes rain clouds, predicts sudden localized heavy downpours, and helps to mitigate damage due to regional disasters.

GPS / ITS

### DSRC (Dedicated Short Range Communication) System

Installed at a parking lot entrance, construction site entry gate or similar location, these systems enable exchange of vehicle information and other data with ETC systems. The result is smoother access, improved safety and enhanced security.

GPS / ITS

### Automotive ETC2.0/ETC System

These terminals allow for toll payment processing on toll roads without the need to bring the vehicle to a halt. Recently, applications have broadened to vehicle access control at parking lots and construction sites.

GPS / ITS

### GPS (GNSS) Receiver

These high-precision position sensors can accurately pinpoint their current position anywhere on earth by receiving and processing signals from GPS (GNSS) satellites. These units are incorporated into automotive devices such as navigation systems, operation management terminals and car-to-car communication terminals. They are also used in mobile devices including mobile phones.

Disaster/Security Monitoring

### GNSS Displacement Monitoring System

These systems determine displacement of features such as the earth's crust, the ground and man-made structures by using GPS (GNSS) based precision positioning technology. They are used for tasks such as monitoring volcanic activity and landslides, as well as managing safety and determining impact on the surrounding area during construction of high-rise buildings.



Medical

### Clinical Chemistry Analyzer

These analyzers automatically take precise measurements of enzymes, fats, sugars, proteins and other substances in the blood.



Medical

### Ultrasound Bone Densitometer

Devices that measure bone density by applying ultrasound to the heel bone, enabling quicker and safer screening than X-ray equipment.



Healthcare



For a support of healthy life

We are expanding our business into the healthcare field, especially medical care, and are providing products for the early prevention of disease and monitoring treatment, utilizing the sensing technology which we have cultivated in the maritime field. Our medical products contribute to people staying healthy by minimizing healthcare costs.



(Model CA-800)

Clinical Chemistry Analyzer

This analyzer contributes to early diagnosis and prevention of disease by measuring the composition of samples such as blood and urine. FURUNO provides small- to medium-sized analyzers and these product lines realize high-quality medical care while reducing the burden of introducing new equipment at healthcare facilities.



(Model CM-300)

Ultrasound Bone Densitometer

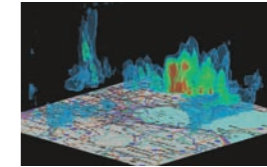
This device measures bone density safely by using ultrasound. Measurement operation is simple and easy-to-use while the product itself has a compact and portable design. The device is best suited for osteoporosis screening tests and will contribute to early diagnosis of osteoporosis and reduction in medical costs.

Disaster Prevention & Security Monitoring Solutions



For a safe, worry-free society

FURUNO is providing system solutions to support everyday safety and peace of mind by offering systems that predict meteorological events, such as sudden localized heavy downpours, with weather radar, and geological events such as volcanic activity and landslides using ground displacement monitoring systems.



(Model WR110)

Meteorological Monitoring and Analyzing System

This system provides detailed analysis of the movement speed and tracks the development of cumulonimbus clouds that bring sudden localized heavy downpours, and can display the information as a high-precision 3-dimensional observation image. The compact and lightweight design is easy to install and useful in cities for flood control measures, and in transportation management applications for railways and roads, thus contributing to a higher level of disaster preparedness.



(DANA Model MG-100 series)

GNSS Displacement Monitoring System

This remote automatic monitoring system measures displacement of terrain and structures over the long term. It monitors terrain displacement to help avoid danger from volcanic activity, landslides, dam/tunnel construction, and similar conditions, and ensures people's safety and security by mitigating disasters.

Communications & GNSS Solutions



For a safer and more convenient society

We supply solutions for movement monitoring and time synchronization utilizing Global Navigation Satellite System (GNSS) and Dedicated Short Range Communication (DSRC) technologies. We also provide equipment for Intelligent Transportation Systems (ITS). We are expanding our business to realize a safer and more convenient society.



(Model GF-8805)

Multi-GNSS Disciplined Oscillator

Receives GNSS satellite signals and outputs a highly accurate time pulse and stable frequency. Suitable for receiving GNSS signals even in harsh environments, the oscillator helps to improve social infrastructure, and is ideal for digital terrestrial broadcasting and fifth-generation wireless systems (5G) for mobile phone communications.



(Model FNK-M100)

Automotive ETC2.0/ETC Systems\*

This device allows vehicles to pass through places such as toll gates on toll roads without stopping. With GPS built-in, it can also supply information by voice to help drivers avoid traffic congestion and drive safely.



Vehicle Management Solution

With automatic identification and IoT technologies that utilize in-vehicle ETCs, our vehicle management solutions allow automation of vehicle entry/exit, guidance, and management, and can be used to improve operational efficiency and save labor at logistics facilities.

Wireless LAN Systems / Electromagnetic Environment Testing Services



For greater comfort and safety in society

Using wireless technologies we provide product management systems along with wireless LAN access points that improve Internet connectivity. We also provide services to measure the electromagnetic compatibility of devices, supporting improvements in the safety and reliability of devices.



ACERA (ACERA 1150w)

Wireless LAN Access Point\*

Access points are devices that enable a wireless connection to the Internet regardless of the users' mobile carrier contract. They provide a pleasant Wi-Fi environment in companies, schools, and other types of locations.

Note: This product is handled by FURUNO SYSTEMS CO., LTD.



finpad (finpad 900f)

Wireless Handheld Terminal\*

These mobile data terminals acquire data by scanning bar codes. The information gathered can then be managed centrally. They make various kinds of work faster and more efficient through the real-time management of product data at distribution warehouses, shopping centers, and other facilities.

Note: This product is handled by FURUNO SYSTEMS CO., LTD.



Electromagnetic Environment Testing Service\*

This service allows one to confirm product safety and reliability by measuring the electromagnetic compatibility of electronic devices.

Note: This product is handled by LABOTECH INTERNATIONAL CO., LTD.

\*Japan market only

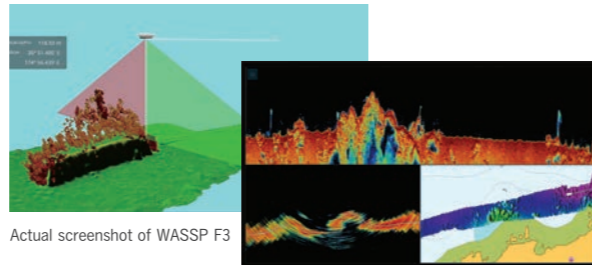
# CSR Initiatives

FURUNO Contributes to Society by Creating New Value

## Consideration for Our Customers

### Advanced Fish-Finding Technology for Improved Efficiency on Fishing Boats

Following the acquisition of a controlling interest in New Zealand's Electronic Navigation Ltd. (ENL), the FURUNO Group acquired ENL's multibeam sonar technology (WASSP) as well as the company's software planning and design capabilities, and incorporated these elements into the development of new products and systems. The WASSP (Wide Angle Sonar Seafloor Profiler) sonar system is a wide-angle fish finder that displays a highly accurate image of underwater and seafloor conditions through a combination of multibeam sonar scanning and computer rendering. Surveying a wide area 120 degrees to port and starboard allows vessels to quickly and accurately grasp the surrounding environment, including fish reefs, drifting objects, fish schools, seafloor topography, and sediment reflectivity. This not only helps prevent damage to fishing gear but also allows for more efficient operation by boosting fuel efficiency and shortening operating times. The FURUNO Group is dedicated to promoting the development of WASSP multibeam sonar as well as sales of various other products capable of improving efficiency in the fishing industry.



Actual screenshot of WASSP F3

### Thorough Quality Management for Safety and Peace of Mind

To provide products that our customers can use with confidence, FURUNO has acquired certification under the ISO 9001 international standard for quality management systems. To ensure that our products function properly in the harshest environments, we also set our own quality standards and employ reliability assessment techniques at each stage of development. Based on such standards we are able to achieve optimal quality for the countries and regions, the environment and applications in which each product is used. Marine electronic equipment is used in an extremely hostile environment, therefore, we test the equipment under a wide range of environmental conditions including temperature, moisture, and vibration. We also perform repeated EMC testing\* so customers can use our products with peace of mind.



EMC testing of a radar antenna

\*Test for the possibility of electromagnetic interference with other equipment and effects on the human body

### A Global Service System for Satisfaction

FURUNO has four service centers—located in Japan, the U.S.A., Germany and Singapore—together with authorized distributors in more than 40 countries. Our online Service Management System (SMS) allows information to be shared among distributors and service centers related to equipment installation and maintenance for each vessel, which enables quick response for repairs and maintenance.

To get the maximum benefit from these systems and to contribute to safe navigation requires not only high product quality but also local guidance on proper installation, settings, and operation to optimize the equipment use. We therefore train service technicians with a comprehensive educational curriculum based on guidelines that cover all of the basic technology. Our subsidiaries outside of Japan also provide guidance to shipyards on equipment and installation procedures, and actively host seminars for customers to explain how to properly operate the equipment.



## Working with Suppliers

### Free Competition and Fair Trade

The FURUNO Group's Code of Conduct explicitly states: "We will comply with laws and regulations as well as social ethics of each country and region, international rules, business contracts, and internal rules." We set up opportunities for fair trade both inside and outside of Japan, and carry out procurement based on a fair evaluation from the standpoint of QCD+E (Q: Quality, C: Cost, D: Delivery time, E: Environment). Our fundamental policy is to comply with all laws and societal norms, and build relationships of mutual trust with our suppliers, based on which we strive to build and maintain healthy partnerships.



Presentation on supplier policy

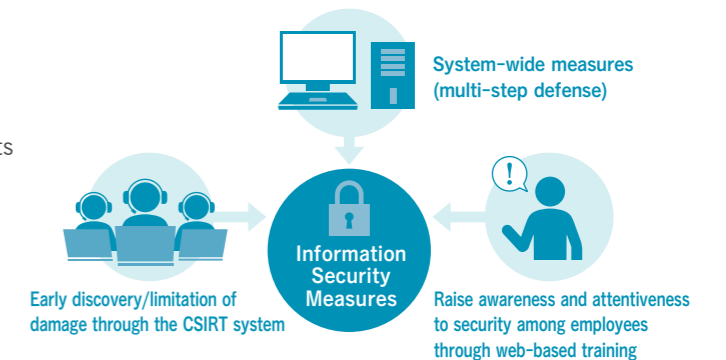
## Risk Management

### Security Trade Control

In order to ensure the proper implementation of security export controls aimed at maintaining international peace and security, FURUNO's President is the chief executive responsible for setting up the control system. Regarding all goods, software and technologies for export, we determine if anything is on a list subject to control and strictly implement screening of the prospective end user and end uses involved in each trade.

### Information Security Measures

Because system-wide measures are unable to completely prevent increasingly sophisticated cyberattacks, FURUNO publishes an in-house newsletter on security and conducts drills simulating a cyberattack to raise awareness of and attentiveness to security among employees. We are also building a new CSIRT (Computer Security Incident Response Team) system to carry out an initial response should a cyberattack get through our defensive systems, which will reduce risk and quickly mitigate any damage.



## Environmental Consciousness

With global environmental issues becoming more serious, FURUNO considers the environment to be one of our vital management issues. The core mainstays of our environmental policy are protection of the global environment, the creation of a recycling-oriented society, and conservation of biodiversity. We are working to manufacture products that have low environmental impact and to reduce impact in our business activities in the effort to achieve sustainability in society.

