## Global Network / Corporate Information (as of March 1, 2018)



FURUNO (UK) LTD. FURUNO NORGE A/S FURUNO DANMARK A/S FURUNO BROADBAND SERVICE CENTER ApS 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 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.

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

## Financial Highlights (Consolidated)

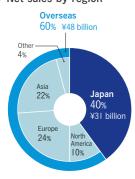
Years ended the last day of February

#### ▶ Operating income / Operating income ratio

FURUNO (CYPRUS) LTD FURUNO EURUS LLC



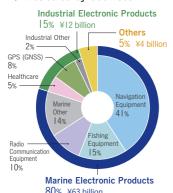
#### ▶ Net sales by region



#### ▶ Net income (loss) attributable to shareholders of the parent company / ROE



#### ▶ Net sales by business



#### Company Outline

(as of February 28, 2018)

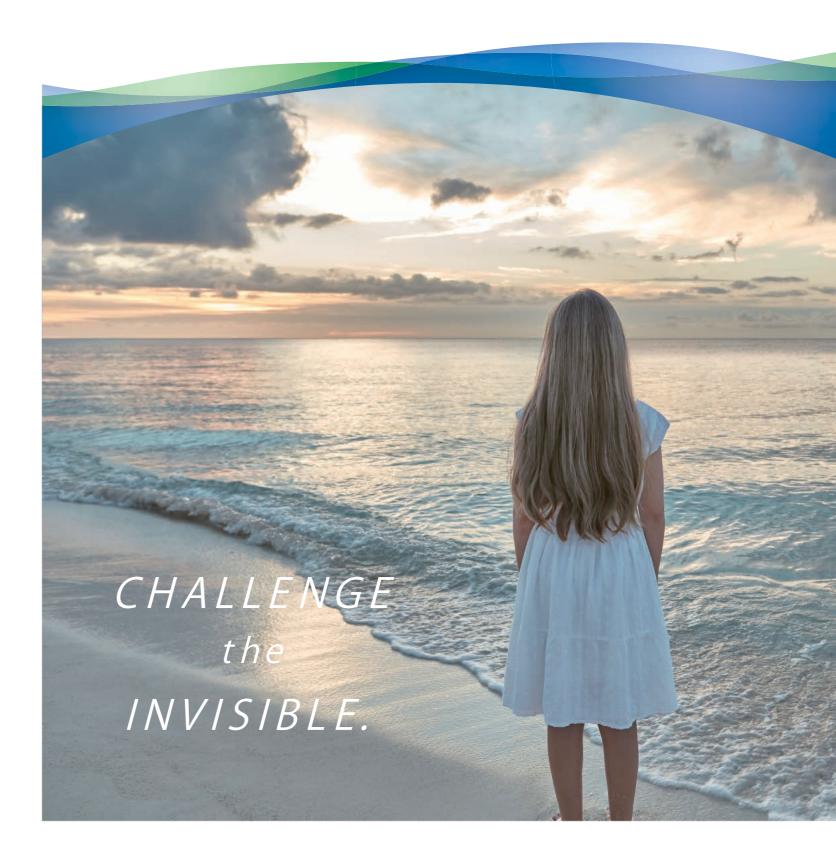
Company Name	FURUNO ELECTRIC CO., LTD.
Incorporated	May 23, 1951
Headquarters	9-52 Ashihara-cho, Nishinomiya City, Hyogo 662-8580, Japan
Capital	¥7,534 million
Number of Employees	2,920 (consolidated)
Consolidated Sales	¥79,050 million (\$703.7 million)*
President	Yukio Furuno
Website	http://www.furuno.com

\*U.S. dollar amounts represent translations of Japanese yen at the approximate exchange rate in FY2017 of 112.34 yen = U.S.\$1.



# Corporate Report 2018 – 2019

Corporate Profile & CSR Report



The information in this pamphlet is current as of June 1, 2018.
 All brand and product names are registered trademarks, trademarks or service marks of their respective holders

<sup>·</sup> iPad and iPhone are trademarks of Apple Inc. registered in the U.S. and other countries.

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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#### ■ 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, 2017 – February 28, 2018 (some content from March 2018 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 FURLINO INT Center

### PRESIDENT'S MESSAGE

# Achieve better safety and peace of mind to bring about an environmentally friendly society

FURUNO ELECTRIC CO., LTD. (FURUNO) was the first company in the world to successfully commercialize a fish finder in 1948, and in the more than half century since that time, we have contributed to the progress of society and industry by offering cutting-edge, innovative electronic devices that serve customers' needs. "Contributing to the society by creating new values" is what we consider as our role in the society and this spirit is regarded as the most important value to be borne by all of our employees and is clearly stated in our management principles.

"SPC & I" embodies the basis upon which we create new values. By "Integrating" our knowledge, experience and know-how derived from our business activities together with our three technical core competencies, "Sensing", "Processing" and "Communication", we shall strive to continually provide solutions that are of value to our customers on a globe scale.

Our fields of business have extended from our main business field of the maritime industry to medical as well as ICT industries. It is our mission in our business activities to continually contribute to the society by "achieving better safety and peace of mind to bring about an environmentally friendly society", and we shall continue to strive to achieve that end.

We respectfully appreciate your thorough understanding and support.

- A company exists to serve society.
- Its management must be creative.
- The happiness of its employees comes with the growth of a company.



Business Theme Action Guidelines

- Technology for Visibility
- Moving forward to the future
- Standing firm to seek creativity
- Challenging for the best
- Respecting sincerity

President Yukio Furuno

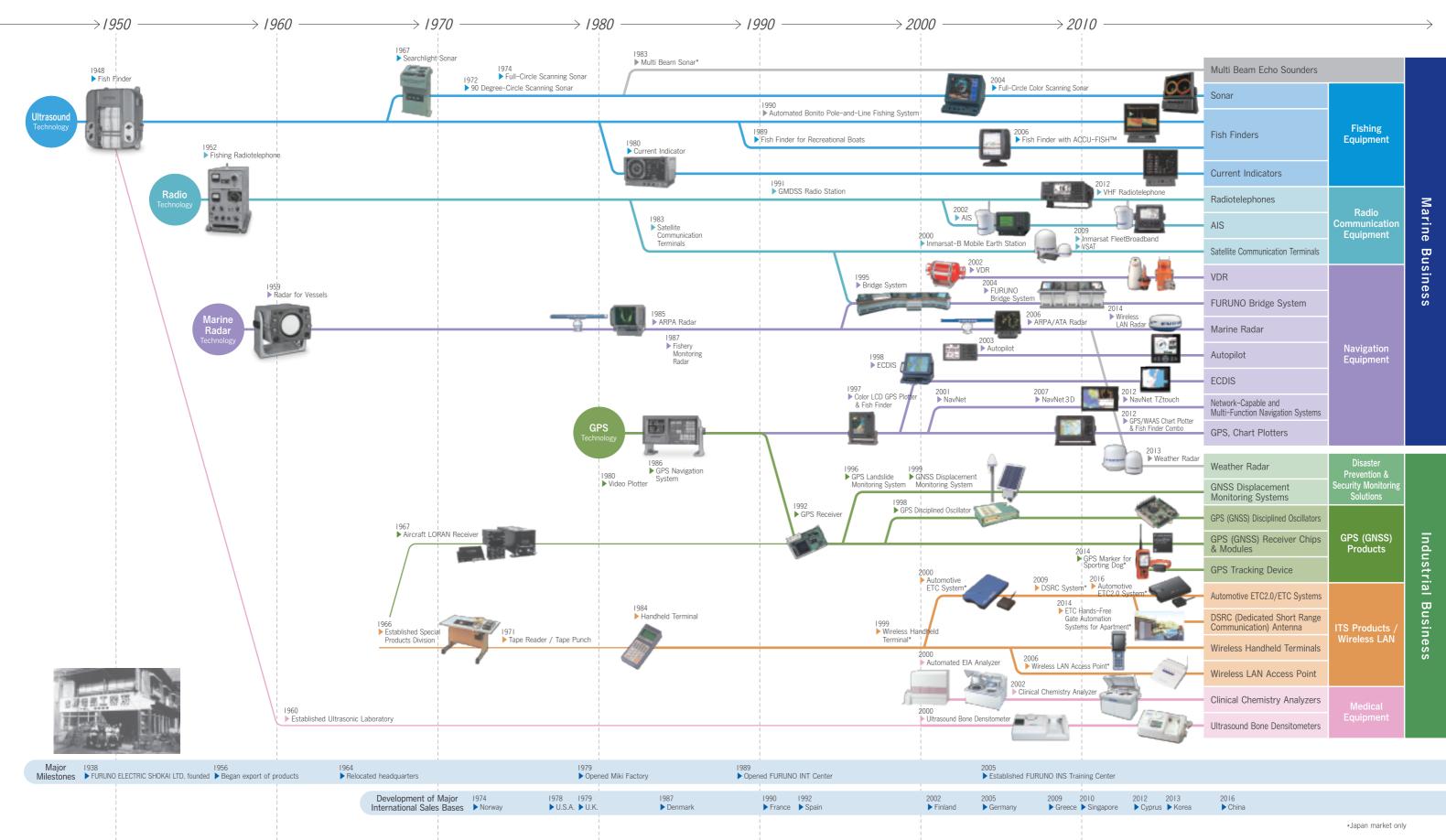


FURUNO will contribute to the development of society and industry previously invisible, using our SPC core competencies and our

# by giving visual form to that accumulated know-how.



Through "Integration" of the knowledge, experience, skills, and know-how accumulated through our business activities with our three core areas of technological expertise—
"Sensing", "Processing" and "Communication"—we create solutions that are of great value to our customers.





**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 Gov

Merchant For Merchant Vessels Fishing For Fishing Vessels Recreational For Recreational Boats Government For Government Vessels

#### 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.





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.



#### Radar

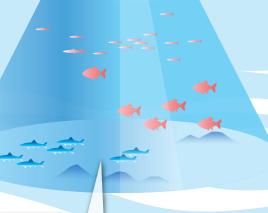
Radar acts as the eyes of a ship, sending out radio waves as a means of detecting other vessels and obstructions in the surrounding area. Radar allows ships to navigate safely, even when dense fog reduces visibility.

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#### 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.



## 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

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.



#### 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



A means of communication while at sea, used in times of distress or



## Radiotelephone

emergency and to receive maritime safety information (navigation warnings, weather information, etc.)







#### 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.



#### 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 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.



(....

## 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.



#### 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.



#### **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)

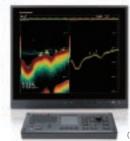
#### Solid State Doppler Radar

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.



# 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.



(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.



(Widdel 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.



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.

### **▶▶** TOPICS

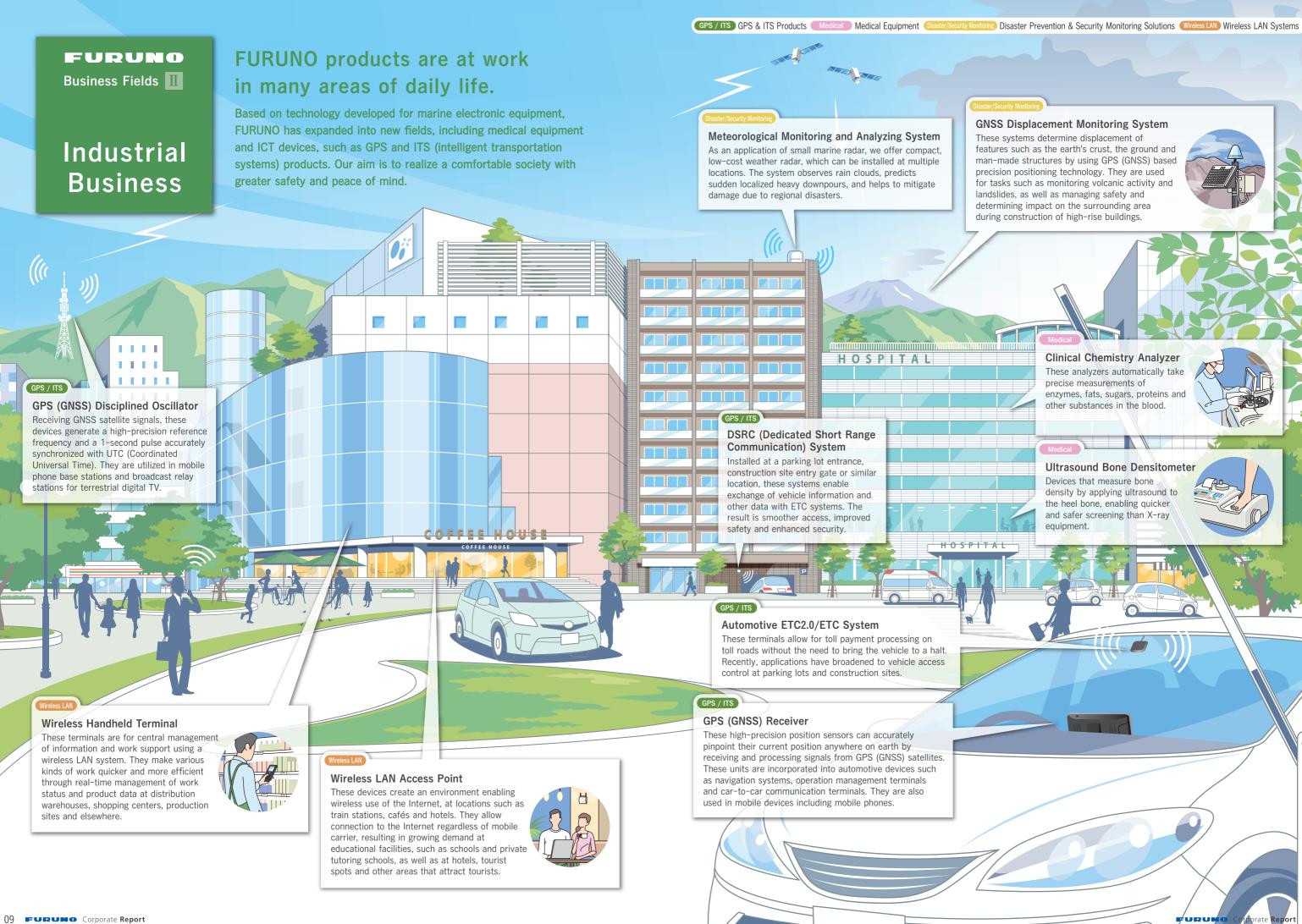
## An entirely new way of maneuvering your boat using gestures!



An autopilot system automatically controls the rudder so that the boat travels in the direction you set. FURUNO's NAVpilot series accurately maintains your set course with stable, optimal, automatic steering by taking vessel speed and hull shape into account and responding to changes in sea conditions.

FURUNO's latest NAVpilot-300 autopilot features a custom Gesture Controller wireless remote control to change course or switch steering modes from anywhere on the boat. You can change direction while fishing from the bow with just a gesture. This cutting-edge feature enables stress-free steering.

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#### For a support of healthy life



#### **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.

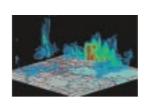




#### **Ultrasound Bone Densitometer**

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







(Model WRI00)

#### **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.



#### **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.



#### 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



#### 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.



#### For greater comfort and safety in society





(ACERA 1020)

### 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.



#### 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

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#### **Consideration for Our Customers**

#### Providing Added Value in R&D

FURUNO develops unique ship steering support solutions for safe, secure and efficient sea navigation.

FURUNO is seeking early implementation of systems such as: a planning terminal for planning routes on electronic charts displayed on large high-resolution 4K screens using touch screen operation (navigation plan creation support system); an AR navigation system that uses augmented reality technology to superimpose navigational information for other vessels onto footage taken using cameras onboard your vessel, supporting your crew in steering and lookout duties through better visibility; and tablet solutions for remotely monitoring key navigational equipment on board.

## The AR navigational information display system of the future proposed by FURUNO





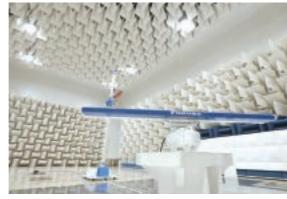
AIS information and a vessel's hull shape are displayed for an intuitive grasp of other vessels' movement even in conditions of poor visibility

Route display supports more reliable course maintenance

#### 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.

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



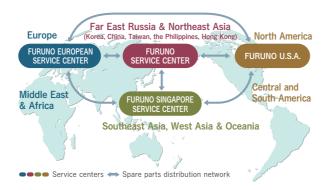
EMC testing of a radar antenna

#### 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

#### **Proper 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 cargo and technologies for export, we determine if anything is on a list subject to control and strictly implement screening of the prospective consumer and 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.



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