

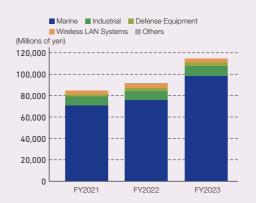






#### **Business Outline**

"Achieve better safety, security and comfort to bring about a society and sea navigation that considers the needs of people and the environment" as a Business Vision, FURUNO aims to conduct business activities that contribute to our customers and society.



### Sales Composition by Segment

Marine 86



• Main Products: Radar, Fish Finder, Scanning Sonar, ECDIS (Electronic Chart Display and Information System), etc.





• Main Products: ETC2.0/ETC on-board equipment. GPS (GNSS) receiver, Biochemical Analyzer, etc.

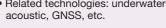


**Defense Equipment** 

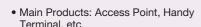


• Related technologies: underwater

acoustic, GNSS, etc.







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\*Ratios calculated based on FY23 sales



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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.

> Kazuma Waimatsu Marine Electronic Products Division General Manager

#### **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.



#### Remote System for Annual Performance Tests on Liberian-flagged Vessels



HermAce, a cyber security and remote monitoring platform for ships developed by FURUNO

This service monitors data from FURUNO's equipment onboard vessels in real time on land using digital twin technology.

The use of HermAce as an alternative to the Annual Performance Test (APT) of VDRs has been approved for ships registered with Nippon Kaiji Kyokai in Panama and the Marshall Islands, and now by the Liberian Administration.

The APT of VDRs required an annual visit to the vessel by a qualified engineer to check the operation and voyage information records. This is expected to reduce the time required for vessel adjustments and engineers to visit the vessel, thereby reducing inspection costs.

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#### **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.



#### Toward the Realization of Smart Fishery

Recent changes in the marine environment have increased the uncertainty surrounding the fishing industry. In 2023, FURUNO started to provide a "Fishery Viewing Diary" in Japan that will serve as a foundation for operational analysis, human resource development, operational planning, and stock assessment, using DX data from fish finders and tide gauges.



Fishing vessel with the latest Smart Bridge (Turkey)

#### **For Pleasure Boats**



#### For safe and comfortable boating

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 our users, we are expanding our efforts to enhance customer value.



#### Awarded NMEA Best Product of 2023 for 53 consecutive years

In 2023, FURUNO received the best products in 6 out of 18 categories by NMEA (National Marine Electronics Association). This is the 53rd consecutive year for FURUNO to be honored since we received the NMEA Best Manufacturer Award in the fish finder category in FY1971. We will continue to meet the expectations and trust of marine electronics users all around the world.



#### **For Workboats**



#### For the safety and security of maritime operations

FURUNO contributes to the safety, security, and comfort of its customers while continuously providing innovative and reliable products to users of government ships and port marine and work vessels.



#### FURUNO supports government and municipal vessels

FURUNO products have been adopted by many government vessels, including patrol vessels of the Japan Coast Guard, which are responsible for maritime enforcement and rescue operations, harbor patrol vessels, which are responsible for port supervision and surveys, and training ships of various educational institutions, which train future crew members.



Source of picture: Japan Coats Guard (https://www.kaiho.mlit.go.jp/soubi-yosan/sentei/ship.html)

#### **For Maintenance Services**



#### To ensure that products are useful to customers

FURUNO provides world-class technical services and statutory inspections in a timely and accurate manner, using its global service network to ensure that its products perform and maintain their best performance anytime, anywhere.



#### Global service system for peace of mind

The Merchant Vessel Division, which has customers all over the world, has implemented an online system called "SMS" (Service Management System) to provide efficient services. SMS is a web-based database that stocks information such as product support history, failure prevention measures, service progress and result reports. Any problems or findings are fed back to the sales, service, development, and quality departments to help improve quality of operations.



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## **Industrial Business**

<Healthcare-GNSS-ITS>













Based on the technology developed for marine electronic equipment, FURUNO provides equipment and services that realize safe, secure and comfortable lives in three businesses: Healthcare, GNSS (time synchronization, chips & modules) and ITS (toll machines, ETC).

> Yukio Nobuhiro System Products Division General Manager

#### **Healthcare business**



#### Biochemical analyzers and reagents

These devices measure more than 100 items, including familiar items. FURUNO provides high-quality data by good combination of FURUNO's instruments and reagents in Southeast Asia and contributes to the improvement of the medical environment.

#### **GNSS** business

#### **Automotive & Industrial**

We started to provide "eRideOPUS 9," a high-precision dual-frequency GNSS receiver chip for V2X. It achieves positioning accuracy of 50cm DRMS without correction data, contributing to improving vehicle safety and reduction of traffic accidents.

#### Time synchronization

Our dual-frequency GNSS receivers have been selected by several global base station vendors for their 5G projects, with deliveries beginning in 2023. It has the world's highest level of time accuracy and unique technology to suppress accuracy degradation in urban areas.



#### **ITS business**

ITS (Intelligent Transportation Systems) connects people, roads, and vehicles in a network and contributes to social issues.

In addition to the ETC2.0/ETC, we will contribute to logistics with a vehicle access control service that applies ETC authentication technology.



# Defense Equipment Business Related SDGs >> 8 BUSINESSE RELATED SDGs >> 8 BUSINESSE RELATED SDGs >> 14 BUSINESSE RELATED SDGs >> 14 BUSINESSE RELATED SDGs >> 15 BUSINESSE RELATED SDG >> 15 BUSINESSE RELATED SDG











Using its core technologies in marine electronics, FURUNO is committed to R&D for the Ministry of Defense, to provide safety and security for the people in Japan.

> Takeshi Miyazaki Avionics and Defense Electronics Division General Manager

#### Underwater acoustic technologies

The division has begun to study low power consumption, compactness, light weight, and strong resilience against voltage of the transmitter and receiver, with a view to installing USVs or UUVs.



# Wireless LAN Systems-Handy Terminal Business Related SDGs >> 4 security | 12 construction of the final control of











FURUNO provides wireless LAN access points and wireless network management systems for better Internet access. We are also developing communication systems for the IoT field that can be used in social infrastructures.

> Satoshi Nakatani FURUNO SYSTEMS Co., Ltd. President

#### 11ah access point for IoT gateway support

IEEE802.11ah-compliant access points can communicate over long distances with a radius of approximately 1 km. It is expected to play a role in supporting social infrastructure.



#### Handy Terminal "finpad Ag1" of next generation

By integrating our accumulated know-how, middleware products, and new platforms, we can expand the range of customer applications, such as linking with business systems using a browser and expanding functions by adding applications, to provide new value.

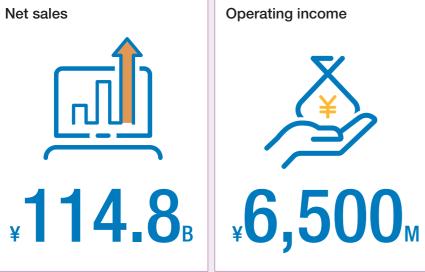


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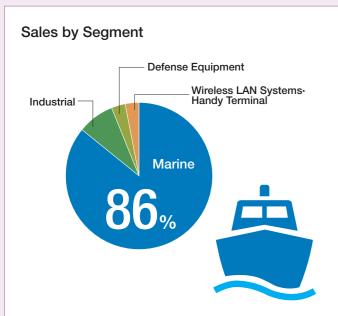
### FY2023 FURUNO At a Glance

#### **Financial Data**

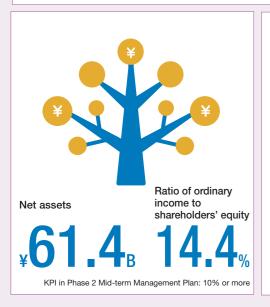
















#### Non-financial Data

