+357 96 030922
info@marketpublishers.com

# Global Marine Wave Radars Market Growth 2026-2032

https://marketpublishers.com/r/G9BE0FE002F3EN.html
Date: February 2026
Pages: 126
Price: US$ 3,660.00 (Single User License)
ID: G9BE0FE002F3EN

## Abstracts

The global Marine Wave Radars market size is predicted to grow from US$ 44.80 million in 2025 to US$ 85.17 million in 2032; it is expected to grow at a CAGR of 9.6% from 2026 to 2032.

Marine wave radar, in the current engineering and observation systems, remains a relatively small-scale, engineering-oriented device, with a price level significantly lower than military or high-end surveillance radars. In 2025, the global annual new installations of marine wave radar are projected to be approximately 12,400 units, a considerable portion of which will come from standardized configurations in ports, offshore engineering projects, offshore wind farms, and shore-based observation points. The price per unit is around US$3,700, primarily for software-based or lightly modified solutions built on X-band navigation radar platforms with added wave inversion algorithms. In high-end engineering and energy scenarios, systems with higher stability, dedicated antennas, algorithm licensing, and long-term service can reach a delivery price of US$15,000–30,000 per unit, but these represent a limited proportion. Overall, the system-level gross profit margin for these products is approximately 30%–45%, significantly lower than military radars but higher than ordinary navigation radar systems. Typical usage includes: one wave radar unit per port or critical waterway node; one to two units per offshore wind farm substation or construction base port; and two to four units deployed in large offshore engineering or oil and gas operation areas based on coverage requirements, creating a continuous demand for replacement and expansion.

Supply Chain

The upstream supply chain for marine wave radars primarily includes: high-stability RF power amplifiers and microwave components, radar antennas and rotation/stabilization mechanisms, high-speed signal processing chips and industrial computing units,

+357 96 030922
info@marketpublishers.com

corrosion-resistant metal and composite material housings, high-reliability marine-grade connectors and cables, and algorithmic software and embedded systems. The combined costs of raw materials, precision manufacturing, system integration, and software development typically account for 55%–70% of the total system cost. RF stability, antenna consistency, and long-term reliability in marine environments directly determine system performance and engineering acceptance. Typical upstream suppliers include: Analog Devices, Infineon, NXP Semiconductors, Rohde & Schwarz, and TE Connectivity, which define the cost and technological boundaries in terms of RF performance, long-term supply, and industrial-grade reliability.

Manufacturer Characteristics

Radac, Miros, and Rutter have the deepest experience in engineering-grade wave radars and quantitative inversion algorithms, and their products have been widely incorporated into European and North American engineering and port specifications; Furuno, Garmin, and Raymarine, on the other hand, rely more on mature navigation radar platforms, entering the wave monitoring application market through algorithmic and system upgrades; Chinese manufacturers are gradually increasing their market share in the port and offshore engineering markets.

Case Study

In 2024, a North Sea country issued tender documents for a new offshore wind farm and waterway safety monitoring project, explicitly requiring the deployment of Marine Wave Radars at substations and key waterway nodes to continuously obtain significant wave height, dominant wave direction, and period data. The requirements included a coverage radius of at least 3 km, a data refresh cycle of ?3 minutes, and the ability for the system to operate year-round in strong winds, rain, snow, and high humidity and salt spray environments, and to interface with existing sea state warning and operational decision-making systems. The project ultimately adopted Radac (Delft)'s wave radar system as the core equipment, combined with Miros' wave inversion and quality control algorithms, and supplemented with Rutter's radar processing solutions on some offshore platforms. A total of 18 wave radar systems were deployed, becoming the standard configuration for subsequent offshore wind power and port engineering projects in that country.

Applications

Marine Wave Radar is primarily used in: sea state monitoring around offshore wind

+357 96 030922
info@marketpublishers.com

farms and substations, port and waterway safety management, operational decision-making for offshore oil and gas and Floating Production Storage and Offloading (FPSO) units, assessment of construction and lifting windows for offshore engineering projects, long-term observation of coastal and offshore sea conditions, and research on wave evolution and extreme sea states by research institutions. Typical downstream customers include: national marine and meteorological agencies, port authorities and waterway administrations, offshore wind power developers and operators, international oil and gas companies, and large offshore engineering and marine equipment contractors, such as NOAA, ?rsted, Equinor, Shell, and DNV.

Breakthrough Strategy

For Marine Wave Radar manufacturers, the real breakthrough direction is not to continue making radar hardware 'more expensive and more complex,' but to transform wave radar from an 'optional monitoring device' into a 'default data node in engineering and operational systems.' Specifically, the first step is to proactively engage in application-side specifications: focusing on high-frequency decision-making scenarios such as port operation window assessment, offshore wind turbine lifting safety, and waterway navigation restrictions, directly mapping the significant wave height, dominant wave direction, and period indicators output by the radar to engineering rules for 'whether operations are feasible,' thus ensuring that owners mandate the use of wave radar data in tender documents and operating procedures; the second step is to lower the product form, no longer emphasizing 'dedicated radar,' but transforming the wave inversion capability into a quickly deployable 'radar + algorithm module' that can be directly mounted on existing shipborne or shore-based X-band radar platforms, entering projects with incremental costs of a few thousand dollars, rapidly expanding the accessible market; the third step is to shift from one-time equipment sales to project-based and service-bound models, extending the lifecycle revenue of a single unit through algorithm licensing, data interface subscriptions, operation and maintenance support, and annual calibration services, rather than competing directly with navigation radar on hardware unit price; the fourth step is systematic bundled sales, packaging Marine Wave Radar with buoys, wave acceleration sensors, weather stations, or port dispatch systems as a complete 'sea state sensing subsystem,' making the radar no longer an isolated procurement item, but an indispensable part of the system. Through the above approach, manufacturers can significantly increase installation volume, project penetration, and long-term revenue without a significant increase in the unit price. This is the most realistic and replicable breakthrough strategy in the low-unit-price, engineering-oriented market of Marine Wave Radar.

+357 96 030922
info@marketpublishers.com

Market Influences

The growth of the Marine Wave Radar market is driven, on the one hand, by the increasing intensity of offshore wind power, port upgrades, and marine engineering activities – the further offshore and deeper the engineering projects extend, the greater the reliance on non-contact, area-based, real-time wave data. On the other hand, the increasing frequency of extreme weather events and rising safety and compliance requirements are leading port and energy operators to increasingly adopt wave radar as the 'front-end sensing layer' for operational decision-making. Regionally, Europe continues to lead in standards and demand in the port and offshore wind power sectors, North America maintains stability in research and oil and gas applications, while China, with the intelligentization of ports and the large-scale construction of offshore wind farms, is becoming the fastest-growing market for new installations. In terms of cost and competition, radio frequency and algorithms constitute the core barriers. The scope for simple hardware price competition is limited, instead driving leading manufacturers to secure project lifecycle value through system integration, software licensing, and long-term service contracts. Overall, marine wave radar will remain a specialized niche market driven by engineering projects, with gradually solidifying standards and slowly increasing concentration. Its growth logic is highly correlated with investment in marine infrastructure.

LP Information, Inc. (LPI) ' newest research report, the “Marine Wave Radars Industry Forecast” looks at past sales and reviews total world Marine Wave Radars sales in 2025, providing a comprehensive analysis by region and market sector of projected Marine Wave Radars sales for 2026 through 2032. With Marine Wave Radars sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US$ millions of the world Marine Wave Radars industry.

This Insight Report provides a comprehensive analysis of the global Marine Wave Radars landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyzes the strategies of leading global companies with a focus on Marine Wave Radars portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms’ unique position in an accelerating global Marine Wave Radars market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Marine Wave Radars and breaks down the forecast by Operating Frequency Band, by Application, geography, and market size to highlight

+357 96 030922
info@marketpublishers.com

emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global Marine Wave Radars.

This report presents a comprehensive overview, market shares, and growth opportunities of Marine Wave Radars market by product type, application, key manufacturers and key regions and countries.

Segmentation by Operating Frequency Band:

HF-Band

X-Band

Segmentation by Coverage:

?1–2 km

2–6 km

>10 km

Segmentation by Update Rate:

?10 min

2–5 min

?1 min

Segmentation by Application:

Merchant Ships

Offshore Platforms

+357 96 030922
info@marketpublishers.com

Land-Based Observation Stations

Others

This report also splits the market by region:

Americas

United States

Canada

Mexico

Brazil

APAC

China

Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK

+357 96 030922
info@marketpublishers.com

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

The below companies that are profiled have been selected based on inputs gathered from primary experts and analysing the company's coverage, product portfolio, its market penetration.

RS Aqua (Xylem) (Public, Portsmouth, UK)

Furuno (Public, Hyogo, Japan)

Radac (Private, Delft, Netherlands)

Miros (Private, Asker, Norway)

Rutter (Public, Newfoundland, Canada)

Garmin (Public, Olathe, USA)

FutureWaves (Public, Groton, USA)

CODAR (Private, Mountain View, USA)

Raymarine (Public, Hudson, USA)

+357 96 030922
info@marketpublishers.com

Wartsila (Public, Helsinki, Finland)

Sperry Marine (Public, Charlottesville, USA)

Norwegian Subsea (Private, Oslo, Norway)

OceanWise (Private, Alton, UK)

WISE Group (Private, Stavanger, Norway)

Obscape (Private, Delft, Netherlands)

Helzel (Private, Kaltenkirchen, Germany)

Kekan Marine Technology (Private, Yantai, China)

Vic-Ocean (Private, Qingdao, China)

Wellmax (Private, Nanjing, China)

Nortek (Private, Oslo, Norway)

Key Questions Addressed in this Report

What is the 10-year outlook for the global Marine Wave Radars market?

What factors are driving Marine Wave Radars market growth, globally and by region?

Which technologies are poised for the fastest growth by market and region?

How do Marine Wave Radars market opportunities vary by end market size?

How does Marine Wave Radars break out by Operating Frequency Band, by Application?

+357 96 030922
info@marketpublishers.com

# Contents

+357 96 030922
info@marketpublishers.com



## 3 GLOBAL BY COMPANY

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

# List Of Tables

## LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

# List Of Figures

## LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

## I would like to order

Product name: Global Marine Wave Radars Market Growth 2026-2032

Product link: https://marketpublishers.com/r/G9BE0FE002F3EN.html

Price: US$ 3,660.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G9BE0FE002F3EN.html