+357 96 030922
info@marketpublishers.com

Global Assisted Docking System Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G62000B9A321EN.html
Date: January 2026
Pages: 154
Price: US$ 4,480.00 (Single User License)
ID: G62000B9A321EN

Abstracts

The global Assisted Docking System market size is expected to reach $ 656 million by 2032, rising at a market growth of 10.9% CAGR during the forecast period (2026-2032).

From the perspective of the global marine equipment market, Assisted Docking Systems remain a relatively niche market, but one with high engineering added value. In 2025, the global market is projected to see approximately 11,000 new installations of assisted docking systems, primarily concentrated in large yachts, passenger ferries, cruise ships, high-end service vessels, offshore engineering vessels, and some newly built intelligent commercial vessels. The price of a single system varies considerably: solutions primarily based on sensor fusion and control algorithms with limited modifications to the propulsion system have an overall delivery price of approximately US$15,000–40,000 per unit; while systems with deep integration of propulsion, thruster, and rudder control, supporting fully automatic docking, can reach US$80,000–200,000 per unit, with gross profit margins typically ranging from 35% to 50%, significantly higher than single navigation radar or sensor products. An Assisted Docking System is a comprehensive sensing and control system for low-speed maneuvering and docking/undocking operations of ships. Its core objective is to significantly reduce the workload and accident risk for captains and pilots during docking in complex harbors, narrow berths, strong crosswinds/currents, and high-density vessel environments. This system typically integrates marine radar, visual/optical sensors, ultrasonic/laser rangefinding, GNSS/inertial navigation, and propulsion and rudder control algorithms to achieve centimeter-level situational awareness of the vessel relative to the dock, surrounding obstacles, and target berth. It then outputs thrust, rudder angle, and thruster commands automatically or semi-automatically to assist in docking, undocking, and low-speed lateral movement operations. From an engineering perspective, the assisted docking system is not a single device, but a system-level product comprising

+357 96 030922
info@marketpublishers.com

'sensing layer + decision algorithm + execution interface,' and is usually included as a ship maneuvering and safety subsystem in new vessel specifications or high-level port docking requirements.

Supply Chain

The upstream components of the Assisted Docking System primarily include: high-resolution marine radar and microwave components, industrial-grade cameras and optical sensors, laser/ultrasonic ranging modules, high-precision GNSS and inertial navigation units, ship control interface modules, embedded industrial computing platforms, and corrosion-resistant metal and composite material housings and marine-grade connectors and cables. Sensors, algorithm software, system integration, and engineering debugging costs typically account for 60%-75% of the total system cost. System reliability, low-speed ranging accuracy, and multi-sensor fusion stability directly determine engineering acceptability. Typical upstream suppliers include: Analog Devices, Infineon, NXP Semiconductors, Bosch Sensortec, and TE Connectivity, which constitute key cost and technological boundaries in terms of industrial-grade reliability, long-term supply, and suitability for marine applications.

Manufacturer Characteristics

Raymarine, Volvo Penta, and Kongsberg, relying on mature marine electronics and propulsion control systems, have significant system integration advantages in the high-end vessel and engineering vessel sectors; emerging manufacturers are entering the market from algorithms, visual perception, and automation control, gradually expanding to complete vessel solutions.

Breakthrough Points

For assisted docking system manufacturers, the real breakthrough direction is not in continuously adding more hardware sensors, but in transforming assisted docking from a 'high-end optional feature' to a 'default safety capability in port and vessel operating systems.' Specific paths include: First, actively engaging with port and classification society regulations to directly link docking safety, low-speed maneuvering accident rates, and system assistance capabilities, requiring new vessels or specific vessel types to be equipped with assisted docking systems in their technical specifications; Second, weakening the concept of a 'standalone system' in product design, modularizing docking algorithms and sensing capabilities so they can be directly integrated into existing navigation radar, camera systems, and propulsion control platforms, allowing

+357 96 030922
info@marketpublishers.com

for entry into more vessel types at a lower incremental cost; Third, shifting from one-time delivery to software licensing, algorithm upgrades, and maintenance services, extending the revenue life cycle per vessel through continuous calibration, port map updates, and system maintenance; Fourth, collaborating with port digital systems, packaging ship-side assisted docking systems with shore-based guidance and berth management systems to form an integrated ship-to-shore solution, thereby increasing project-level penetration and indispensability.

Example

In 2024, driven by the global smart and autonomous vessel market, Hantong Winji applied for a patent for an unmanned vessel autonomous docking and undocking system based on visual-laser fusion. This technology obtains and pre-processes images of the dock area to extract dock edge features, calculates the initial attitude angle of the vessel relative to the dock, and optimizes the initial attitude angle to achieve the optimal vessel attitude estimation result.

Applications

The Assisted Docking System is primarily used in: docking and undocking operations of large yachts and service vessels, low-speed maneuvering of cruise ships and passenger ferries within ports, docking of offshore engineering vessels and special purpose vessels, safe maneuvering in complex port basins and narrow berths, and as a supporting system for high-level intelligent berths in ports. Typical downstream customers include: large yacht owners, cruise ship operators, port management agencies, offshore engineering and special vessel operators, and high-end shipbuilding manufacturers such as Azimut-Benetti, Princess Yachts, MSC Cruises, Royal Caribbean, and Maersk.

Market Influencing Factors

The growth of the assisted docking system market is driven, on the one hand, by the increase in the number of high-end vessels, the increased density of port berths, and stricter safety and compliance requirements – the larger the vessel and the more complex the port, the greater the reliance on low-speed maneuvering safety and automated assistance. On the other hand, changes in the crew experience structure and operating cost pressures are also driving shipowners to reduce their reliance on highly skilled captains through technological means. Regionally, Europe is leading the way in incorporating assisted docking into configuration standards in the cruise and high-

+357 96 030922
info@marketpublishers.com

end yacht sectors, North America maintains stable demand in the high-end private vessel market, while China, with its improving port intelligence and high-end shipbuilding capabilities, is becoming an emerging growth market. From a competitive landscape perspective, simply stacking hardware is unlikely to create long-term barriers; the true value lies in algorithm reliability, system integration capabilities, and engineering implementation experience. It is expected that the future market will show an evolution characterized by 'slowly increasing concentration among system manufacturers and a rising proportion of software and service revenue.'

This report studies the global Assisted Docking System production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Assisted Docking System and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Assisted Docking System that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global Assisted Docking System total production and demand, 2021-2032, (Units)

Global Assisted Docking System total production value, 2021-2032, (USD Million)

Global Assisted Docking System production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Units), (based on production site)

Global Assisted Docking System consumption by region & country, CAGR, 2021-2032 & (Units)

U.S. VS China: Assisted Docking System domestic production, consumption, key domestic manufacturers and share

Global Assisted Docking System production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Units)

Global Assisted Docking System production by Distance Measurement Accuracy, production, value, CAGR, 2021-2032, (USD Million) & (Units)

+357 96 030922
info@marketpublishers.com

Global Assisted Docking System production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Units)

This report profiles key players in the global Assisted Docking System market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Raymarine (Public, Hudson, USA), Volvo Penta (Public, G?teborg, Scotland), Avikus NEUBOAT (Private, Fort Lauderdale, USA), Navtech Radar (Public, Oxfordshire, UK), Yanmar (Public, Osaka, Japan), Simrad (Public, Egersund, Norway), Honda (Public, Tokyo, Japan), Riviera (Private, Coomera, Australia), Wartsila (Public, Helsinki, Finland), Marautec (Private, Shanghai, China), etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Assisted Docking System market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (Units) and average price (K US$/Unit) by manufacturer, by Distance Measurement Accuracy, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Assisted Docking System Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

+357 96 030922
info@marketpublishers.com

India

Rest of World

Global Assisted Docking System Market, Segmentation by Distance Measurement Accuracy:

Decimeter Level

Centimeter Level

Global Assisted Docking System Market, Segmentation by Update Frequency:

1–2 Hz

?5 Hz

Global Assisted Docking System Market, Segmentation by GNSS Accuracy:

Standard GNSS

Differential GNSS

Global Assisted Docking System Market, Segmentation by Application:

Merchant Ship

Fishing Vessels

Others

Companies Profiled:

+357 96 030922
info@marketpublishers.com

Raymarine (Public, Hudson, USA)

Volvo Penta (Public, G?teborg, Scotland)

Avikus NEUBOAT (Private, Fort Lauderdale, USA)

Navtech Radar (Public, Oxfordshire, UK)

Yanmar (Public, Osaka, Japan)

Simrad (Public, Egersund, Norway)

Honda (Public, Tokyo, Japan)

Riviera (Private, Coomera, Australia)

Wartsila (Public, Helsinki, Finland)

Marautec (Private, Shanghai, China)

CHUNTAI (Private, Beijing, China)

AMI Marine (Private, Southampton, UK)

HTWG Heavy Industry (Private, Nantong, China)

MetaX (Private, Shanghai, China)

Orca (Private, Xi'An, China)

Kongsberg (Public, Kongsberg, Norway)

Trelleborg (Private, Dubai, UAE)

CSSC (Private, Shanghai, China)

Straatman (Private, Zwijndrecht, Netherlands)

TOYOTA MARINE (Public, Aichi Prefecture, Japan)

+357 96 030922
info@marketpublishers.com

Key Questions Answered:

1. How big is the global Assisted Docking System market?
2. What is the demand of the global Assisted Docking System market?
3. What is the year over year growth of the global Assisted Docking System market?
4. What is the production and production value of the global Assisted Docking System market?
5. Who are the key producers in the global Assisted Docking System market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

5 MARKET ANALYSIS BY DISTANCE MEASUREMENT ACCURACY

6 MARKET ANALYSIS BY UPDATE FREQUENCY

+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

10 INDUSTRY CHAIN ANALYSIS

+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

+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

I would like to order

Product name: Global Assisted Docking System Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G62000B9A321EN.html

Price: US$ 4,480.00 (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/G62000B9A321EN.html