

Medical Device Connectivity Market Forecasts to 2032 – Global Analysis By Component (Hardware, Software, Services), Deployment Mode, Technology, Application, End User and By Geography

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Abstracts

According to Statistics MRC, the Global Medical Device Connectivity Market is accounted for \$3.4 billion in 2025 and is expected to reach \$12.1 billion by 2032 growing at a CAGR of 20.1% during the forecast period. Medical Device Connectivity refers to the integration and communication of medical devices with healthcare IT systems, enabling seamless data exchange and real-time monitoring. This technology allows devices such as patient monitors, infusion pumps, and ventilators to transmit vital information directly to electronic health records (EHRs), improving clinical workflows and patient outcomes. By automating data capture and reducing manual entry, it enhances accuracy, efficiency, and decision-making in healthcare settings. Medical device connectivity supports remote monitoring, telehealth, and interoperability across platforms, making it a critical component in modern, data-driven healthcare environments focused on safety, quality, and operational excellence.

Market Dynamics:

Driver:

Growing Adoption of Electronic Health Records (EHRs)

The increasing adoption of Electronic Health Records (EHRs) is a major driver of the medical device connectivity market. EHR systems require seamless integration with medical devices to ensure accurate, real-time data capture and improved clinical workflows. Connectivity enhances patient monitoring, reduces manual errors, and

supports faster decision-making. As healthcare providers prioritize digital transformation and data interoperability, the demand for connected devices that can interface directly with EHR platforms continues to rise, fueling market expansion globally.

Restraint:

High Implementation Costs

High implementation costs remain a significant restraint in the medical device connectivity market. Integrating devices with IT systems involves substantial investment in hardware, software, and skilled personnel. Smaller healthcare facilities may struggle with budget constraints, limiting their ability to adopt advanced connectivity solutions. Additionally, ongoing maintenance and upgrades add to the financial burden. These cost-related challenges can slow market penetration, especially in developing regions where infrastructure and funding for healthcare technology are limited.

Opportunity:

Technological Advancements

Technological advancements present a strong opportunity for growth in the medical device connectivity market. Innovations in wireless communication, cloud computing, and interoperability standards are making device integration more efficient and scalable. Emerging technologies like IoT and AI enhance remote monitoring and predictive analytics, improving patient outcomes. As healthcare systems modernize, the demand for smart, connected devices grows. These advancements enable seamless data exchange, reduce manual intervention, and support personalized care, driving market expansion across diverse medical settings.

Threat:

Data Security and Privacy Concerns

Data security and privacy concerns significantly hinder the growth of the medical device connectivity market. The transmission of sensitive patient data across connected devices raises risks of cyberattacks and data breaches, leading to potential legal liabilities and loss of trust. Healthcare providers may hesitate to adopt connectivity solutions due to compliance challenges with regulations like HIPAA and GDPR. These

concerns slow integration efforts and increase the cost and complexity of securing connected systems.

Covid-19 Impact:

The COVID-19 pandemic significantly accelerated the adoption of medical device connectivity. With the surge in remote patient monitoring and telehealth services, healthcare providers relied heavily on connected devices to manage care outside traditional settings. The crisis highlighted the importance of real-time data exchange and interoperability, prompting investments in digital infrastructure. While supply chain disruptions initially affected device availability, the long-term impact has been positive, with increased awareness and demand for connectivity solutions driving innovation and market growth.

The infusion pumps segment is expected to be the largest during the forecast period

The infusion pumps segment is expected to account for the largest market share during the forecast period, owing to its widespread use in hospitals and clinics for precise drug delivery. These devices require reliable connectivity to ensure accurate dosage tracking and integration with EHR systems. As chronic disease management and inpatient care demand grow, infusion pumps play a critical role in improving treatment efficiency and safety. Their compatibility with connectivity platforms makes them a cornerstone of modern healthcare workflows.

The anesthesia machines segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the anesthesia machines segment is predicted to witness the highest growth rate, due to increasing surgical procedures and demand for advanced monitoring. Connectivity enables real-time data transmission from anesthesia machines to EHRs, enhancing patient safety and clinical decision-making. Innovations in machine design and integration capabilities are making these devices more adaptable to connected environments. As hospitals prioritize precision and automation in operating rooms, the adoption of connected anesthesia machines is expected to surge rapidly.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, because rapid urbanization, expanding healthcare infrastructure, and growing

investments in digital health technologies are driving demand. Countries like China, India, and Japan are embracing connected healthcare solutions to improve patient outcomes and operational efficiency. Government initiatives supporting health IT adoption and the presence of major medical device manufacturers further strengthen the region's dominant position in the global market.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR, because region's advanced healthcare infrastructure, strong regulatory framework, and high adoption of EHR systems contribute to rapid growth. Increasing focus on patient safety, data interoperability, and remote monitoring fuel demand for connected devices. Additionally, the presence of key market players and ongoing technological innovation make North America a hub for cutting-edge connectivity solutions in healthcare.

Key players in the market

Some of the key players in Medical Device Connectivity Market include Medtronic, Johnson & Johnson, Stryker Corporation, Abbott Laboratories, Boston Scientific, GE Healthcare, Philips Healthcare, Siemens Healthineers, Becton, Dickinson and Company (BD), Masimo Corporation, Hillrom (Baxter International), Cerner Corporation, Capsule Technologies, Smiths Medical, Nihon Kohden

Key Developments:

In March 2025, Cadrenal Therapeutics has partnered with Abbott to advance tecarfarin, a novel oral anticoagulant, through a pivotal Phase 3 trial (TECH-LVAD) for patients with Left Ventricular Assist Devices (LVADs). Abbott will support trial design, site identification, and provide expertise on the HeartMate 3™ LVAD, the only LVAD approved in the U.S. Tecarfarin has received FDA Orphan Drug Designation for preventing thromboembolism in LVAD patients, aiming to offer a safer and more effective alternative to warfarin.

In December 2024, Abbott Laboratories and DexCom have resolved all ongoing patent disputes concerning continuous glucose monitoring devices. The settlement includes the dismissal of all pending cases worldwide and a mutual commitment to refrain from future patent or appearance-related legal actions for the next decade.

Components Covered:

Hardware

Software

Services

Deployment Modes Covered:

On-Premise

Cloud-Based

Technologies Covered:

Wired Technologies

Wireless Technologies

Applications Covered:

Vital Signs & Patient Monitoring

Anesthesia Machines

Ventilators

Imaging Systems

Infusion Pumps

Other Applications

End Users Covered:

Hospitals

Ambulatory Care Centers

Home Healthcare

Diagnostic & Imaging Centers

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032

- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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