

Smart Railways Market to Achieve USD 57.72 Billion by 2030, with 9.2% Revenue CAGR Forecasted

The global smart railways market size was USD 26.32 billion in 2021, and is expected to register a revenue CAGR of 9.2% over the forecast period.

NEW YORK, NY, UNITED STATES, June 30, 2023 /EINPresswire.com/ -- The [global smart railways market](#) reached USD 26.32 billion in 2021 and is projected to achieve a revenue

compound annual growth rate (CAGR) of 9.2% during the forecast period. The increasing demand for sustainable rail transportation for passengers is a key driver for the growth of market revenue. The International Energy Agency (IEA) predicts that annual investment in rail infrastructure will reach USD 315 billion by 2050. Railway network operators worldwide are adopting advanced technology and equipment to reduce costs per passenger-kilometer or tonne-kilometer. Consequently, high-speed rail is being upgraded from conventional railway systems. Governments in various regions are investing in energy-efficient passenger transportation to combat pollution, leading railway operators to transition to high-speed locomotives and maximize rail system revenues. These factors significantly contribute to the growth of the smart railways market.

The global commercial rollout of 5G technology is transforming the smart railways market. With bandwidths exceeding 1GHz, 5G provides reliable communication with ultra-low latency. Traditional radio technologies such as Terrestrial Trunked Radio (TETRA), Global System for Mobile Communications (GSM-R), and Wi-Fi are insufficient to meet the expanding requirements of rail operators and passengers. 5G services support various smart railway solutions, including intelligent signaling and control systems and electrification optimization. Enhanced transcoding and processing speed, combined with precise 5G positioning, enhance train-to-train (T2T) communications capabilities. These technological advancements drive the revenue growth of the market.



Reports And Data

Get a sample of the report @ <https://www.reportsanddata.com/download-free-sample/2183>

Some Key Highlights from the Report

By component, solutions segment accounted for largest market revenue share in 2020.

Advancements in technologies have resulted in modernization of various departments of railways, with a focus on lowering input costs, improving customer experience, and providing high level security to transactions and passengers travelling. Hence, demand for these smart railways solutions has grown and is expected to register a significant growth during the forecast period within developing regions, which is expected to drive segment revenue growth.

By type, on-board trains segment is expected to witness a faster revenue CAGR during the forecast period due to an increase in number of commuters. Trains are being modified based on world-class standards like smart coaches and windows, access to basic facilities, security measures during emergencies and availability of medical help in case of accidents involving passengers. Installing cameras and sensors not only helps the passengers but also the railway operators to keep track of activities on a real-time basis and update the information for transparency, which is expected to drive segment revenue growth.

Smart railways are utilizing historical data resources to enable predictive maintenance and apply machine learning to solve problems in innovative ways. Operators are leveraging smart technologies to deliver integrated digital experiences such as driver-machine interfaces and infotainment to drive positive experiences and efficiencies for drivers and passengers. This data can be properly utilized and go beyond providing passive safety to improve operations and gain efficiencies across the rail network.

Smart railways market in Europe accounted for largest revenue share in 2020 due to presence of high-end train manufacturers, adoption of IoT technology, investments in smart railways and research and innovation program for smart railways, government initiatives, and fast economic growth. Increase in research and development investments for development of autonomous trains, government spending to implement high-performance trains and increasing smart city projects including smart railways also support market revenue growth.

Smart Railways market in Asia Pacific region is expected to witness a faster revenue CAGR during the forecast period due to rising urbanization and increasing demand for sustainable mobility for long distances. Government is also engaged in regulating new policies to develop railways based on world class standards to provide better customer experience and safety of the highest level. Developing smart cities also requires railways running on renewable source of energy and smart technologies installed to provide commuters with a safe, and comfortable journey, which is expected to drive market revenue growth.

In December 2021, Alstom and Hitachi Rail confirmed that their joint venture had signed contracts with High Speed Two to design, build and maintain the next generation of very high speed trains for High Speed Two (HS2) Phase 1, including an initial 12-year train maintenance contract. The fleet will be 100% electric and be one of the world's most energy efficient very high speed trains due to the lower train mass per passenger, aerodynamic design, regenerative power, and latest energy efficient traction technology.

Competitive Landscape:

Hitachi Rail Limited, ABB, Schneider Electric, TE Connectivity, Siemens Mobility, Alstom, TOSHIBA CORPORATION, Hyperloop Transportation Technologies, KONUX GmbH, INDRA SISTEMAS, ALE USA Inc., Thales, Uptake Technologies Inc., EKE-Electronics Ltd, Televic, Aitek S.p.A.

The global market is further segmented into type and application:

Measuring System Outlook (Revenue, USD Billion; 2019-2030)

- Track measurement
 - Bullet train lines
 - Conventional lines
 - Hand type track measuring equipment
 - Traction type track measuring equipment
 - Monitoring console
 - Others

Solution Outlook (Revenue, USD Billion; 2019-2030)

- Rolling stock
- Electrification and energy storage system
- Control and Signaling
- Tunnels
- Others

Digital Solution Outlook (Revenue, USD Billion; 2019-2030)

- Passenger information system
- Smart ticketing System
- Rail Analytics System
- Operations and control solutions
- Others

Sensor Type Outlook (Revenue, USD Billion; 2019-2030)

- Speed sensors
- Crossing sensors
- Vibration sensors
- Pressure sensors
- Position sensors
- Temperature sensors
- Level sensors
- Others

Regional analysis provides insights into key trends and demands in each major country that can affect market growth in the region.

North America (U.S., Canada, Mexico)

Europe (Germany, U.K., Italy, France, BENELUX, Rest of Europe)

Asia Pacific (China, India, Japan, South Korea, Rest of APAC)

Latin America (Brazil, Rest of LATAM)

Middle East & Africa (Saudi Arabia, U.A.E., South Africa, Rest of MEA)

Request a customized copy of the report @ <https://www.reportsanddata.com/request-customization-form/2183>

Thank you for reading our report. We also offer customized report as per client requirement. Kindly connect with us to know more about customization plan and our team will offer you the altered report.

Get Explore Latest Research Report by Reports and Data:

Automotive Glazing Market - <https://www.reportsanddata.com/report-detail/automotive-glazing-market>

Automotive Laser Headlight System Market - <https://www.reportsanddata.com/report-detail/automotive-laser-headlight-system-market>

Automotive Market - <https://www.reportsanddata.com/report-detail/automotive-market>

First and Last Mile Delivery Market - <https://www.reportsanddata.com/report-detail/first-and-last-mile-delivery-market>

Metal Gear Component Market - <https://www.reportsanddata.com/report-detail/metal-gear-component-market>

John W.

Reports and Data

+1 212-710-1370

[email us here](#)

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/642351008>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors

try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.