

Intelligent Building Automation Technologies Market by Offering (Solutions, Services), Technology (Sensor Technology, Connectivity Technology, Computing Technology), End Use (Residential, Industrial, Commercial) and Region - Global Forecast to 2028

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Report description:

The intelligent building automation technologies market is estimated at USD 90.2 billion in 2023 to USD 152.4 billion by 2028, at a Compound Annual Growth Rate (CAGR) of 11.0%. The increasing emphasis on indoor air quality (IAQ) as a critical factor in occupant health and well-being has emerged as a significant driver fueling the adoption of intelligent building automation technologies. Recognizing the profound impact of air quality on human health, building owners and operators are prioritizing solutions that actively monitor, control, and optimize ventilation systems to ensure optimal IAQ. Intelligent building technologies, equipped with advanced sensors and real-time monitoring capabilities, offer a proactive approach to managing indoor air conditions. These systems can automatically adjust ventilation rates, humidity levels, and air filtration based on occupancy, external environmental factors, and IAQ parameters. By providing a healthier and more comfortable indoor environment, intelligent building automation technologies contribute to increased occupant satisfaction, productivity, and overall well-being. As awareness of the importance of IAQ continues to grow, the integration of these technologies becomes not just a preference but a necessity, driving their widespread adoption and fostering the sustained growth of the intelligent building automation market. "The sensor technology segment is expected to hold the largest market size during the forecast period." Advances in wireless sensor networks represent a transformative force in the realm of sensor technology for intelligent buildings, significantly contributing to the sector's growth and evolution. The adoption of wireless sensors introduced a paradigm shift by offering unprecedented flexibility in installation, mitigating the challenges associated with traditional wired systems. With the elimination of extensive wiring requirements, wireless sensors reduce installation complexities and associated costs, enabling a more streamlined and rapid deployment process. This newfound flexibility not only facilitates the integration of sensors into diverse

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building elements but also allows for easy retrofitting of existing structures, supporting the upgrade of conventional buildings into intelligent, connected spaces. Moreover, wireless sensors enhance scalability, adapting effortlessly to the changing needs of the built environment. The absence of physical constraints imposed by wired connections fosters a dynamic and adaptable sensor infrastructure, aligning seamlessly with the ever-evolving requirements of intelligent building automation systems. Consequently, the integration of wireless sensor networks stands as a cornerstone for the deployment of efficient, cost-effective, and scalable building automation solutions, laying the groundwork for a more responsive and interconnected intelligent building ecosystem.

"The services segment to register the fastest growth rate during the forecast period." The evolution of building codes and standards, particularly driven by a heightened focus on sustainability and energy efficiency, has become a significant catalyst for the demand for intelligent building automation services. As regulatory frameworks place greater emphasis on environmentally responsible construction practices, organizations seek expert consulting services to navigate the complex landscape of evolving requirements. Consulting services play a pivotal role in ensuring that building automation systems align seamlessly with the latest codes and standards, guaranteeing compliance with stringent sustainability benchmarks. This involves strategic planning, comprehensive audits, and the development of tailored solutions that not only meet current regulations but also anticipate future advancements. Concurrently, deployment and training services become instrumental in the practical implementation of these strategies, ensuring that organizations can effectively integrate and operate systems that adhere to the latest regulatory mandates. In a rapidly changing regulatory environment, intelligent building automation services provide a crucial bridge between evolving standards and the practical application of compliant, energy-efficient, and sustainable building systems.

"Asia Pacific's highest growth rate during the forecast period."

The rollout of 5G networks and the concurrent expansion of connectivity infrastructure are catalyzing a transformative shift in the deployment of intelligent building automation technologies in the Asia Pacific region. The advent of 5G introduces unprecedented levels of speed, reliability, and low-latency communication, creating a robust foundation for the seamless integration of intelligent systems within buildings. This high-speed connectivity empowers real-time data exchange between diverse devices and sensors, forming the backbone for responsive and agile intelligent building solutions. As the Internet of Things (IoT) ecosystem flourishes, 5G becomes instrumental in facilitating the interconnectivity of a myriad of sensors, actuators, and automation devices spread across buildings. This synergy between 5G and intelligent building technologies not only enhances the efficiency of existing systems but also enables the implementation of more sophisticated applications, such as advanced analytics, AI-driven decision-making, and immersive occupant experiences. The accelerated deployment of intelligent building automation technologies, fueled by the 5G revolution, not only elevates the overall performance and responsiveness of building systems but also positions the Asia Pacific region at the forefront of smart infrastructure development.

In-depth interviews have been conducted with chief executive officers (CEOs), Directors, and other executives from various key organizations operating in the intelligent building automation technologies market.

-□By Company Type: Tier 1 - 35%, Tier 2 - 45%, and Tier 3 - 20%

-□By Designation: C-level -35%, D-level - 25%, and Others - 40%

-□By Region: North America - 30%, Europe - 30%, Asia Pacific - 25%, Latin America- 5%, and Middle East & Africa - 10%,

The major players in the intelligent building automation technologies market Honeywell International Inc. (US), Johnson Controls International plc (US), Siemens AG (Germany), Schneider Electric SE (France), ABB Ltd. (Switzerland), Eaton Corporation (US), Trane Technologies plc (Ireland), Carrier Global Corporation (US), Rockwell Automation, Inc. (US), Azbil Corporation (Japan), Ingersoll Rand (US), Emerson Electric co. (US), Robert Bosch GmbH (Germany), Hubbell Incorporated (US), Lutron Electronics Company (US), Cisco Systems, Inc. (US), Cushman & Wakefield plc (US), Jones Lang LaSalle Incorporated (US), CBRE Group, Inc. (US), Current Lighting Solutions, LLC (US), Verdigris Technologies, Inc. (US), 75F (US), BuildingIQ (US), KMC Controls (US), Spaceti (Netherlands), eFACiLiTY (India), Softdel (US). These players have adopted various growth strategies, such as partnerships, agreements and collaborations, new product launches, enhancements, and acquisitions to expand their intelligent building automation technologies market footprint.

Research Coverage

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The market study covers the intelligent building automation technologies market size across different segments. It aims at estimating the market size and the growth potential across different segments, including solutions (facility management system, security & access control system, fire detection, prevention system, energy management system, other solutions), services (professional services, managed services), by technology type (sensor technology, actuator, connectivity technology, computing technology, other technologies) end use (residential, commercial, industrial) and Region (North America, Europe, Asia Pacific, Middle East & Africa, and Latin America). The study includes an in-depth competitive analysis of the leading market players, their company profiles, key observations related to product and business offerings, recent developments, and market strategies.

Key Benefits of Buying the Report

The report will help the market leaders/new entrants with information on the closest approximations of the global intelligent building automation technologies market's revenue numbers and subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies.

Moreover, the report will provide insights for stakeholders to understand the market's pulse and provide them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

1. **Analysis of key drivers** (Increasing adoption of advanced energy-efficient systems in buildings, rising deployment of Building Automation Systems (BAS), advancements in wireless protocols and wireless sensor technologies), restraints (High implementation costs, concerns regarding cyberattacks and data breaches), opportunities (Increasing government initiatives for developing connected infrastructure, increasing focus on integrated BIM solutions), and challenges (Lack of skilled manpower for operating building automation system, lack of standardized communication protocols) influencing the growth of the intelligent building automation technologies market.
2. **Product Development/Innovation:** Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the intelligent building automation technologies market.
3. **Market Development:** Comprehensive information about lucrative markets - the report analyses the intelligent building automation technologies market across various regions.
4. **Market Diversification:** Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the intelligent building automation technologies market.
5. **Competitive Assessment:** In-depth assessment of market shares, growth strategies and service offerings of leading Honeywell International Inc. (US), Johnson Controls International plc (US), Siemens AG (Germany), Schneider Electric SE (France), ABB Ltd. (Switzerland), Eaton Corporation (US), Trane Technologies plc (Ireland), Carrier Global Corporation (US), Rockwell Automation, Inc. (US), Azbil Corporation (Japan), Ingersoll Rand (US), Emerson Electric co. (US), Robert Bosch GmbH (Germany), Hubbell Incorporated (US), Lutron Electronics Company (US), Cisco Systems, Inc. (US), Cushman & Wakefield plc (US), Jones Lang LaSalle Incorporated (US), CBRE Group, Inc. (US), Current Lighting Solutions, LLC (US), Verdigris Technologies, Inc. (US), 75F (US), BuildingIQ (US), KMC Controls (US), Spaceti (Netherlands), eFACiLiTY (India), Softdel (US).

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