

Romania Building Automation & Control Systems Market Segmented by Product (Heating, Ventilation & Air Conditioning, Electronic Security & Safety, and Lighting Controls & Energy Management Systems), By Communication Protocol (Wired, Wireless), By End User (Commercial, Industrial, and Residential), By Region, Competition, Forecast and Opportunities, 2018-2028F

<https://marketpublishers.com/r/R40C3353C90EEN.html>

Date: November 2023

Pages: 90

Price: US\$ 3,500.00 (Single User License)

ID: R40C3353C90EEN

Abstracts

Forecast Period 2024-2028

Market Size (2022) USD 1.38 Billion

CAGR (2023-2028) 8.41%

Fastest Growing Segment Wired

Largest Market Bucharest-Ilfov and South Region

Market Size (2028) USD 2.23 Billion

Market Overview

The Romania Building Automation & Control Systems market was valued at USD 1.38 Billion and is anticipated to project robust growth in the forecast period with a CAGR of 8.41% during the forecast period. The Building Automation & Control Systems (BACS)

market in Romania is experiencing a noteworthy transformation, reflecting the nation's growing dedication to modernization, energy efficiency, and the integration of smart building technologies. Romania's construction sector is undergoing a sustained expansion, driven by residential, commercial, and industrial projects, and this surge in construction activity is generating an increasing demand for advanced BACS solutions that can enhance the efficiency, safety, and sustainability of buildings across the country.

One of the primary drivers propelling the Romanian BACS market is the nation's strong commitment to energy efficiency and environmental sustainability. Romania has established ambitious targets for reducing energy consumption and greenhouse gas emissions, aligning its efforts with European Union directives. BACS systems play a pivotal role in helping Romania attain these objectives by optimizing energy utilization in buildings. These systems provide real-time monitoring and control of various building functions, including heating, ventilation, air conditioning (HVAC), lighting, and security. Through intelligent management of these systems, BACS can significantly curtail energy waste, lower operational costs, and contribute to the realization of a greener and more sustainable future for Romania.

Another key driver is the increasing awareness of the multifaceted benefits that smart buildings, powered by BACS solutions, can offer. Building owners and operators across Romania are recognizing the advantages of integrating BACS technologies into their properties. These solutions not only enhance the comfort and security of occupants but also drive operational efficiency. For instance, smart lighting and HVAC control systems can adapt to occupant preferences and environmental conditions, optimizing comfort while simultaneously minimizing energy consumption. Additionally, the capability to remotely monitor and manage building systems through BACS platforms provides greater convenience and control for building operators, resulting in heightened demand for these transformative technologies.

Furthermore, the Romanian BACS market is witnessing a burgeoning interest in building management software and cloud-based solutions. These innovative technologies enable centralized control and monitoring of multiple building systems from a single platform, revolutionizing overall operational efficiency and simplifying facility management. Building owners and operators are increasingly embracing these software solutions to streamline operations, reduce maintenance expenses, and gain actionable insights into building performance. The integration of software-driven analytics into BACS systems holds the potential to usher in an era of predictive maintenance, where issues can be identified and addressed before they result in costly breakdowns, further

solidifying the importance of these solutions in Romania's building management landscape.

Moreover, Romania's rapid urbanization and modernization initiatives are driving the adoption of BACS solutions in both new construction and retrofitting of existing buildings. Urban centers like Bucharest are witnessing a surge in high-rise commercial and residential developments, creating fertile ground for BACS integration. Additionally, the renovation and revitalization of older buildings are providing opportunities to enhance their functionality, energy efficiency, and overall sustainability through BACS technology. This trend underscores the adaptability and versatility of BACS systems in catering to the diverse needs of Romania's evolving urban landscape.

In conclusion, the Building Automation & Control Systems market in Romania is during a transformative period marked by its pivotal role in shaping the nation's approach to modern construction and sustainable building management. Romania's commitment to energy efficiency, the growing recognition of the myriad benefits of smart buildings, and the embrace of advanced software solutions are all driving forces behind the market's growth and evolution. As Romania continues to modernize its infrastructure and real estate sectors, BACS technology will remain at the forefront, playing a central role in elevating the efficiency, sustainability, and comfort of the country's buildings and urban environments.

Key Market Drivers

Energy Efficiency and Sustainability Initiatives

One of the primary drivers propelling the Building Automation & Control Systems (BACS) market in Romania is the nation's strong emphasis on energy efficiency and sustainability. Romania has committed to reducing its energy consumption and greenhouse gas emissions in line with European Union directives and international climate agreements. BACS systems play a crucial role in achieving these ambitious sustainability goals by optimizing energy utilization in buildings. These systems enable real-time monitoring and control of various building functions, including heating, ventilation, air conditioning (HVAC), lighting, and security. Through intelligent management of these systems, BACS can significantly curtail energy waste, lower operational costs, and contribute to a greener and more sustainable future for Romania. The demand for energy-efficient BACS solutions is driven not only by regulatory compliance but also by the desire to reduce utility expenses and enhance corporate social responsibility. Building owners and operators across Romania are increasingly

adopting BACS technology to align with sustainability requirements, achieve green building certifications, and contribute to the global effort to combat climate change. As the nation continues its journey toward a more sustainable future, the BACS market is poised for sustained growth, driven by the imperative to reduce energy consumption and environmental impact.

Advancements in IoT and Artificial Intelligence (AI) Integration

Another significant driver of the Romanian BACS market is the integration of Internet of Things (IoT) and Artificial Intelligence (AI) technologies into building automation systems. These advancements enable BACS to evolve into more intelligent and proactive systems. IoT sensors and devices are being seamlessly integrated into BACS platforms, allowing for real-time data collection and analysis. These sensors monitor various building parameters such as temperature, occupancy, and energy usage, providing a wealth of data that can be leveraged to optimize building operations. The integration of AI algorithms into BACS systems takes this to the next level. AI-driven analytics can process the data generated by IoT sensors to make intelligent decisions and optimize building performance. For example, AI can learn occupant behavior patterns and adjust HVAC and lighting systems to maximize comfort while minimizing energy consumption. Additionally, AI-powered predictive maintenance can identify potential equipment issues before they lead to costly breakdowns, enhancing the overall efficiency and reliability of building systems. This trend is driving demand for BACS solutions that are not only energy-efficient but also smart and adaptive. As organizations in Romania seek to gain a competitive edge through advanced technology, the integration of IoT and AI in BACS systems is poised to play a pivotal role in shaping the market's future.

Enhanced Comfort and Occupant Experience

The desire to enhance comfort and occupant experience within buildings is another compelling driver in the Romanian BACS market. Building owners and operators recognize that creating a comfortable and productive environment for occupants is crucial for employee well-being and satisfaction. BACS solutions offer the means to achieve this goal by providing precise control over building systems. Smart lighting systems, integrated with BACS, allow for dynamic lighting control that adjusts to the time of day and occupant needs. For instance, circadian lighting can mimic natural daylight patterns, supporting occupant circadian rhythms and promoting better sleep and alertness. Similarly, BACS can maintain optimal indoor air quality through HVAC systems, ensuring adequate ventilation and humidity control, which are essential for

occupant health and well-being. Additionally, the integration of security and safety systems within BACS platforms enhances occupant safety and peace of mind. Access control, surveillance, and emergency response systems can be seamlessly integrated, providing comprehensive security coverage and real-time alerts in case of emergencies. As the demand for comfortable, healthy, and productive indoor environments continues to grow in Romania, BACS solutions that prioritize occupant experience are expected to see increased adoption. This trend aligns with global movements toward wellness-focused building design and occupant-centric workplaces.

Urbanization and Modernization Initiatives

Romania's rapid urbanization and modernization initiatives are driving the adoption of BACS solutions across the country. Major cities like Bucharest are witnessing a surge in high-rise commercial and residential developments, creating a significant market for BACS integration. The need to efficiently manage complex building operations, enhance energy efficiency, and provide advanced amenities to urban residents is pushing developers and building owners to embrace BACS technology. Moreover, the revitalization of older buildings and the retrofitting of existing infrastructure are providing opportunities to bring older structures into the digital age. BACS solutions can be deployed to enhance the functionality, energy efficiency, and overall sustainability of these buildings. The adaptability of BACS systems to various building types and sizes positions them as a versatile solution for Romania's evolving urban landscape. As Romania continues its journey toward modernization and urbanization, BACS technology will remain a critical enabler, ensuring that buildings and cities are equipped to meet the demands of the 21st century. This driver underscores the adaptability and relevance of BACS solutions in the ever-evolving Romanian construction and real estate sectors.

Key Market Challenges

High Initial Investment Costs

One of the significant challenges facing the Building Automation & Control Systems (BACS) market in Romania is the high initial implementation costs associated with adopting advanced BACS solutions. While BACS systems offer substantial long-term benefits, including energy savings, operational efficiency, and improved occupant comfort, the upfront capital required can be a significant barrier for many building owners and operators. Deploying BACS involves expenses not only related to the technology itself but also to integration, installation, and customization to suit the

specific needs of each building. For small and medium-sized businesses, as well as residential projects, the initial investment in BACS can be particularly daunting. The perceived high costs can lead to hesitation or delayed adoption of these technologies. In a competitive market where cost considerations play a substantial role in decision-making, the challenge of high implementation costs becomes more pronounced. To address this challenge, stakeholders in the Romanian BACS market, including manufacturers, integrators, and government bodies, must collaborate to promote cost-effective solutions and financing options that make BACS technology more accessible to a broader range of users. This could involve the development of financing models, subsidies, or incentives to ease the financial burden of BACS adoption. Lowering the initial investment barrier is essential to unlocking the potential for BACS to improve energy efficiency and operational effectiveness across diverse building types in Romania.

Complexity of Integration and Interoperability

Another significant challenge within the Romanian BACS market is the complexity of integrating and ensuring interoperability among diverse building automation and control systems. Buildings often rely on a mix of legacy systems, each with its own communication protocols and interfaces, making seamless integration a formidable technical task. This complexity arises from the diverse range of components and systems that fall under the BACS umbrella, including heating, ventilation, and air conditioning (HVAC), lighting, security, and more. Furthermore, the rapid evolution of technology introduces compatibility issues between older and newer systems. For instance, legacy equipment may not readily interface with the latest Internet of Things (IoT)-enabled devices or cloud-based platforms. This challenge can result in operational inefficiencies, data silos, and increased maintenance costs as building operators grapple with the need to manage multiple, sometimes incompatible, systems.

Key Market Trends

Integration of Internet of Things (IoT) and Artificial Intelligence (AI)

One of the most prominent trends shaping the Romanian Building Automation & Control Systems (BACS) market is the integration of Internet of Things (IoT) and Artificial Intelligence (AI) technologies. This convergence is revolutionizing the capabilities of BACS systems, making them smarter, more adaptive, and data driven. IoT sensors and devices are being seamlessly incorporated into BACS platforms, enabling real-time data collection and analysis. These sensors monitor a wide range of building parameters,

including temperature, humidity, occupancy, and energy consumption, generating a wealth of data. The integration of AI into BACS systems takes this data and transforms it into actionable insights. AI-driven algorithms can analyse the data to make intelligent decisions that optimize building performance. For example, AI can learn occupant behaviour patterns and adjust HVAC and lighting systems to maximize comfort while minimizing energy consumption. Additionally, AI-driven predictive maintenance can identify potential equipment issues before they lead to costly breakdowns, enhancing overall system reliability. This trend in the Romanian BACS market reflects a growing demand for systems that not only automate building functions but also continuously improve them based on real-time data and analytics. As organizations seek to enhance operational efficiency and occupant comfort, the integration of IoT and AI technologies in BACS systems is expected to gain further momentum.

Sustainability and Energy Efficiency

A key trend in the Romanian BACS market is a strong emphasis on sustainability and energy efficiency. Romania has set ambitious targets for reducing energy consumption and greenhouse gas emissions in line with European Union directives and global environmental commitments. BACS systems are instrumental in helping the nation achieve these goals by optimizing energy utilization in buildings. Energy management and sustainability initiatives are driving the adoption of BACS solutions that can monitor and control various building systems, including heating, ventilation, air conditioning (HVAC), lighting, and security. Through precise control and real-time monitoring, BACS systems reduce energy waste, lower operational costs, and contribute to a greener and more sustainable future. The demand for energy-efficient BACS solutions is further fuelled by the need to comply with sustainability certifications and green building standards. Building owners and operators in Romania are increasingly seeking BACS technologies that align with these requirements, such as LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method) certifications. This trend underscores the critical role of BACS in helping Romania meet its sustainability targets while also delivering cost savings and operational efficiency.

Enhanced User Experience and Wellness

A noteworthy trend in the Romanian BACS market is the growing focus on enhancing the user experience and occupant wellness within buildings. Building owners and operators are increasingly recognizing the importance of creating comfortable, healthy, and productive indoor environments. BACS systems are at the forefront of achieving

this goal by providing precise control over building systems. Smart lighting systems, integrated with BACS, enable dynamic lighting control that adjusts to the time of day and occupant needs. For instance, circadian lighting can mimic natural daylight patterns, supporting occupant circadian rhythms and promoting better sleep and alertness. Similarly, BACS can maintain optimal indoor air quality through HVAC systems, ensuring adequate ventilation and humidity control, which are crucial for occupant health and well-being. Building automation extends to security and safety systems as well. The integration of access control, surveillance, and emergency response systems within BACS platforms enhances building security and occupant safety. Real-time alerts and access to emergency services provide occupants with peace of mind. This trend aligns with global movements toward wellness-focused building design and occupant-centric workplaces. As Romania places greater emphasis on creating healthier and more productive indoor environments, the demand for BACS solutions that prioritize occupant experience and wellness is expected to continue to rise.

Segmental Insights

Communication Protocol Insights

Based on communication protocol, the wired segment emerges as the predominant segment in the Romania building automation & control systems market, exhibiting unwavering dominance projected throughout the forecast period. Wired communication has long been the backbone of BACS infrastructure, providing robust and reliable connectivity that forms the foundation of intelligent building management. This enduring predominance is underpinned by several key factors. In addition, wired communication protocols offer a high level of data security and reliability. In a world where data integrity and privacy are paramount, wired connections provide a secure means of transmitting sensitive information within BACS systems. This is particularly crucial in applications such as access control and security, where any compromise in communication can have serious consequences. Moreover, the legacy of wired communication in BACS systems contributes to its continued dominance. Many existing buildings in Romania have already deployed wired infrastructure, and upgrading to wireless solutions can be logistically complex and costly. This legacy infrastructure cements the position of wired communication protocols, as they seamlessly integrate with the existing setup. Moreover, the demands of large-scale commercial and industrial buildings often require the robustness and scalability that wired communication can provide. These segments of the market rely on the stability and data-carrying capacity of wired protocols to manage complex systems efficiently.

End User Insights

Based on end user, the commercial segment in the Romania building automation & control systems market emerges as a formidable frontrunner, exerting its dominance and shaping the market's trajectory throughout the forecast period. This dominance is driven by several key factors that underscore the importance of BACS solutions within the commercial sector. Commercial buildings, including office complexes, retail spaces, hotels, and healthcare facilities, have distinct and complex operational needs. These structures demand advanced BACS systems to efficiently manage a wide range of functions, from HVAC and lighting control to access security and energy management. BACS solutions optimize energy usage, enhance occupant comfort, and streamline operational efficiency, all of which are critical for commercial establishments looking to reduce operating costs and improve sustainability. Additionally, the commercial sector in Romania is witnessing rapid growth and urbanization, leading to a surge in construction activities. Newly developed commercial properties are increasingly incorporating BACS technologies from the design phase, ensuring that they are equipped with intelligent building management systems right from the start. This trend is further solidifying the dominance of the commercial segment in the Romanian BACS market. As the commercial sector continues to expand and prioritize smart building solutions, the demand for BACS systems that can enhance operational efficiency and sustainability is expected to remain robust, further cementing the commercial segment's position as a frontrunner in shaping the trajectory of the Romanian BACS market.

Regional Insights

The Bucharest-Ilfov and South Region in the Romania has undeniably established a commanding and influential presence within the country's Building Automation and Control Systems market. This region, encompassing the capital city of Bucharest and the surrounding Ilfov County, stands as the nation's economic and commercial heart. Its significance is reflected in the concentration of diverse building types, including high-rise office complexes, retail centers, industrial facilities, and residential developments. As the epicenter of economic activity and urbanization, this region naturally emerges as a dominant force in the adoption and integration of BACS technology. Several factors contribute to the region's indisputable influence on the BACS market. Firstly, the demand for intelligent building solutions is exceptionally high in Bucharest and Ilfov due to the need for operational efficiency, energy savings, and occupant comfort in bustling urban environments. Commercial buildings rely on BACS systems to streamline operations, reduce costs, and create smart, sustainable spaces that meet global

standards. Furthermore, the region's commitment to sustainability and green building practices aligns perfectly with the capabilities of BACS technology. The push for energy efficiency and environmental responsibility drives building owners and operators in this region to embrace advanced BACS solutions as a means of achieving sustainability goals.

Key Market Players

Schneider Electric SRL

Siemens Romania

Honeywell Romania SRL

Johnson Controls International Romania SRL

ABB S.R.L.

Delta Electronics Romania (Delta Electronics, Inc.)

Legrand Romania SRL

Robert Bosch S.R.L.

Mitsubishi Electric Europe B.V. Sucursala Romania

Hitachi Europe GmbH - Sucursala Romania

Report Scope:

In this report, the Romania Building Automation & Control Systems market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Romania Building Automation & Control Systems Market, By Product:

Heating, Ventilation & Air Conditioning

Electronic Security & Safety

Lighting Controls & Energy Management Systems

Romania Building Automation & Control Systems Market, By Communication Protocol:

Wired

Wireless

Romania Building Automation & Control Systems Market, By End User:

Commercial

Industrial

Residential

Romania Building Automation & Control Systems Market, By Region:

Bucharest Ilfov & South Region

Northwest & Central Region

Southwest & West Region

Northeast & South-East Region

Competitive Landscape

Company Profiles: Detailed analysis of the major companies presents in the Romania Building Automation & Control Systems Market.

Available Customizations:

Romania Building Automation & Control Systems market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Romania Building Automation & Control Systems Market Segmented by Product (Heating, Ventilation & Air Conditi...

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

4. IMPACT OF COVID-19 ON ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET

5. VOICE OF CUSTOMER

6. ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET OVERVIEW

7. ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET OUTLOOK

- 7.1. Market Size & Forecast
 - 7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Product (Heating, Ventilation & Air Conditioning, Electronic Security & Safety, and Lighting Controls & Energy Management Systems)

7.2.2. By Communication Protocol (Wired, Wireless)

7.2.3. By End User (Commercial, Industrial, and Residential)

7.2.4. By Region (Bucharest Ilfov & South Region, Northwest & Central Region, Southwest & West Region, Northeast & South-East Region)

7.2.5. By Company (2022)

7.3. Market Map

8. BUCHAREST IIFOV & SOUTH REGION ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Product

8.2.2. By Communication Protocol

8.2.3. By End User

9. NORTHWEST & CENTRAL REGION ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET OUTLOOK

9.1. Market Size & Forecast

9.1.1. By Value

9.2. Market Share & Forecast

9.2.1. By Product

9.2.2. By Communication Protocol

9.2.3. By End User

10. SOUTHWEST & WEST REGION ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET OUTLOOK

10.1. Market Size & Forecast

10.1.1. By Value

10.2. Market Share & Forecast

10.2.1. By Product

10.2.2. By Communication Protocol

10.2.3. By End User

11. NORTHEAST & SOUTH-EAST REGION ROMANIA BUILDING AUTOMATION & CONTROL SYSTEMS MARKET OUTLOOK

11.1. Market Size & Forecast

11.1.1. By Value

11.2. Market Share & Forecast

11.2.1. By Product

11.2.2. By Communication Protocol

11.2.3. By End User

12. MARKET DYNAMICS

12.1. Drivers

12.2. Challenges

13. MARKET TRENDS AND DEVELOPMENTS

14. COMPANY PROFILES

14.1. Schneider Electric SRL

14.1.1. Business Overview

14.1.2. Key Financials & Revenue

14.1.3. Key Contact Person

14.1.4. Headquarters Address

14.1.5. Key Product/Service Offered

14.2. Siemens Romania

14.2.1. Business Overview

14.2.2. Key Financials & Revenue

14.2.3. Key Contact Person

14.2.4. Headquarters Address

14.2.5. Key Product/Service Offered

14.3. Honeywell Romania SRL

14.3.1. Business Overview

14.3.2. Key Financials & Revenue

14.3.3. Key Contact Person

14.3.4. Headquarters Address

14.3.5. Key Product/Service Offered

14.4. Johnson Controls International Romania SRL

- 14.4.1. Business Overview
- 14.4.2. Key Financials & Revenue
- 14.4.3. Key Contact Person
- 14.4.4. Headquarters Address
- 14.4.5. Key Product/Service Offered

14.5. ABB S.R.L.

- 14.5.1. Business Overview
- 14.5.2. Key Financials & Revenue
- 14.5.3. Key Contact Person
- 14.5.4. Headquarters Address
- 14.5.5. Key Product/Service Offered

14.6. Delta Electronics Romania (Delta Electronics, Inc.)

- 14.6.1. Business Overview
- 14.6.2. Key Financials & Revenue
- 14.6.3. Key Contact Person
- 14.6.4. Headquarters Address
- 14.6.5. Key Product/Service Offered

14.7. Legrand Romania SRL

- 14.7.1. Business Overview
- 14.7.2. Key Financials & Revenue
- 14.7.3. Key Contact Person
- 14.7.4. Headquarters Address
- 14.7.5. Key Product/Service Offered

14.8. Robert Bosch S.R.L.

- 14.8.1. Business Overview
- 14.8.2. Key Financials & Revenue
- 14.8.3. Key Contact Person
- 14.8.4. Headquarters Address
- 14.8.5. Key Product/Service Offered

14.9. Mitsubishi Electric Europe B.V. Sucursala Romania

- 14.9.1. Business Overview
- 14.9.2. Key Financials & Revenue
- 14.9.3. Key Contact Person
- 14.9.4. Headquarters Address
- 14.9.5. Key Product/Service Offered

14.10. Hitachi Europe GmbH - Sucursala Romania

- 14.10.1. Business Overview
- 14.10.2. Key Financials & Revenue

14.10.3. Key Contact Person

14.10.4. Headquarters Address

14.10.5. Key Product/Service Offered

15. STRATEGIC RECOMMENDATIONS

16. ABOUT US & DISCLAIMER

I would like to order

Product name: Romania Building Automation & Control Systems Market Segmented by Product (Heating, Ventilation & Air Conditioning, Electronic Security & Safety, and Lighting Controls & Energy Management Systems), By Communication Protocol (Wired, Wireless), By End User (Commercial, Industrial, and Residential), By Region, Competition, Forecast and Opportunities, 2018-2028F

Product link: <https://marketpublishers.com/r/R40C3353C90EEN.html>

Price: US\$ 3,500.00 (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/R40C3353C90EEN.html>