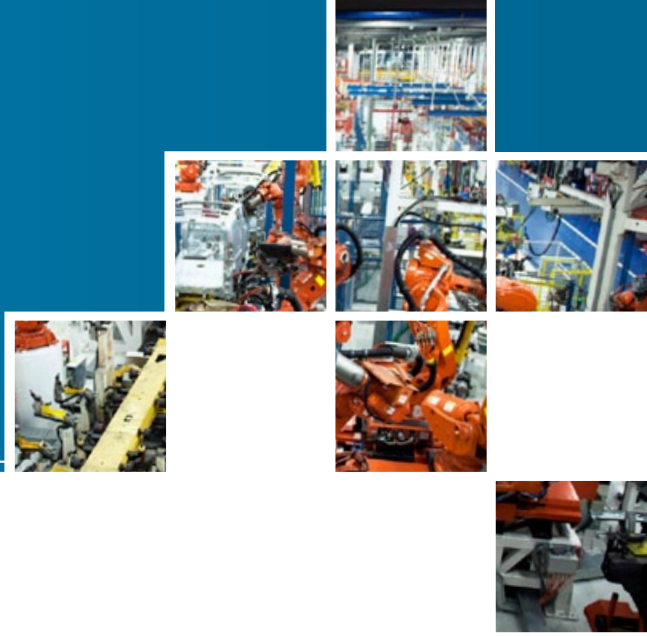
M2M Research Series

Industrial Automation and Wireless IoT



Industrial Automation and Wireless IoT is a comprehensive strategy report from Berg Insight analysing the latest developments on the market for wireless IoT applications in industrial automation worldwide.

This strategic research report from Berg Insight provides you with 120 pages of unique business intelligence including 5-year industry forecasts and expert commentary on which to base your business decisions.

Highlights from this report:

- **Insights** from numerous executive interviews with market leading companies.
- **360-degree overview** of the IoT ecosystem in the industrial automation industry.
- **Comprehensive overview** of key applications for wireless IoT solutions in industrial automation.
- **In-depth analysis** of market trends and key developments.
- **Detailed profiles** of over 58 key players in this market.
- **Updated forecasts** by wireless technology, region, market vertical and device segment lasting until 2020.

Order now!

Please visit our web site to order this report and find more information about our other titles at **www.berginsight.com**

See inside for further details →

Berg Insight's M2M Research Series

What are the key business opportunities in the emerging wireless M2M/IoT market? Berg Insight's M2M Research Series is a unique series of 25 market reports published on a regular basis. Each title offers detailed analysis of a specific vertical application area such as smart metering, fleet management or vehicle telematics. Once per year we also publish summaries of our research with detailed forecasts for the Global and European wireless M2M markets, respectively.

www.berginsight.com

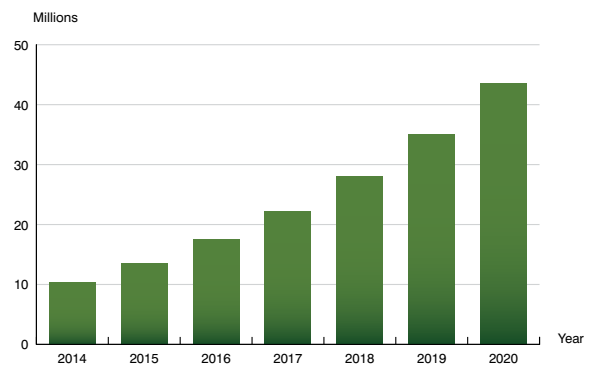
BERG INSIGHT

Wireless IoT improves performance throughout the enterprise value chain

Wireless connectivity is instrumental in the Internet of Things era and the use of wireless solutions in industrial automation is increasing rapidly at all levels of automation systems. Industrial automation systems utilize wireless communication to connect remote and local facilities and equipment to increase operational efficiency. A wireless automation system contains a mix of network technologies, equipment and systems including enterprise and automation systems, network equipment, control devices and field devices. The most common wireless technologies in industrial automation include cellular, 802.11.x Wi-Fi, proprietary unlicensed ISM radio, Bluetooth and 802.15.4 based protocols such as WirelessHART, ISA100.11a, WIA-PA and ZigBee.

Berg Insight estimates that shipments of wireless devices for industrial automation applications including both network and automation equipment reached 3.7 million units worldwide in 2014. Growing at a compound annual growth rate of 23.2 percent, shipments are expected to reach 12.9 million by 2020. The installed base of wireless devices in industrial applications is forecasted to grow at a compound annual growth rate of 27.2 percent from 10.3 million connections at the end of 2014 to 43.5 million devices by 2020. Wi-Fi is widely used for backbone communications as well as in monitoring and control applications within factory automation where Industrial Ethernet has got a strong foothold. Bluetooth is also popular – often as a point-to-point wire-replacement between for example a mobile HMI solution and a field device or control unit. 802.15.4 networks are often used to connect wireless sensors and instrumentation in process automation. Cellular connectivity is typically used for backhaul communication between plants, connecting remote devices in long haul SCADA applications and for third party access to machinery and robots. Most of the major vendors of wireless IoT devices in industrial automation offer a wide range of devices with various wireless technologies in order to support many different applications.

Global automation solution providers such as Emerson, GE, ABB, Honeywell, Schneider Electric, Yokogawa and Rockwell Automation are all major providers of wireless solutions to the automation industry. As wireless solutions have become increasingly popular, more and more major automation equipment and solution vendors are offering wireless technology as part of their solutions. Eaton is a major provider of Wi-Fi and cellular devices for industrial automation applications and Endress+Hauser and Pepperl+Fuchs are successful vendors of 802.15.4 devices. National Instruments offers a wide range of measurement and control equipment featuring embedded Bluetooth and Wi-Fi. Advantech and Kontron offer many of their automation products as well as their network infrastructure equipment together with WPAN, WLAN and WWAN options.



Installed base of active wireless devices in industrial automation (World 2014–2020)

Industrial communication specialists offer equipment and solutions for industrial automation networks and wireless is becoming a natural part of many major vendors' offering. Phoenix Contact, Belden, Laird Technologies, Wago and Weidmüller are major vendors within industrial communications with thousands of employees which all have incorporated one or more wireless standards in their offerings. Red Lion, HMS Networks, Westermo, Moxa and B+B SmartWorx are industrial communication specialists renowned for their wireless offerings. Cisco is one of the largest vendors of communication infrastructure equipment and provides wireless WPAN, WLAN and WWAN devices to a wide range of industries, including industrial automation. Sierra Wireless, CalAmp and Digi International are major cellular M2M device vendors which provide products and solutions to the industrial automation industry.

Today, many companies are increasingly deepening the integration between industrial automation systems and enterprise applications. IT/OT convergence, smart factories, Industry 4.0 and the Industrial Internet of Things are all concepts which are part of the ongoing evolution of industrial automation. Increased interoperability and communication between devices, systems, services and people in combination with technologies such as advanced sensors, smart devices, wireless technologies, 3D printing, mobile devices, wearable technology and big data solutions have the ability to improve performance, flexibility and responsiveness throughout the enterprise value chain.

This report answers the following questions:

- Which are the major applications for wireless IoT in industrial automation?
- Which are the leading wireless IoT solution providers for industrial automation applications?
- What offerings are available from device vendors and service providers?
- What are the key drivers behind the adoption of wireless IoT in industrial automation?
- What impact will technology advancements have on the market?
- How will the market evolve in North America, Asia-Pacific and Europe?
- Why is Big Data analytics and cloud solutions crucial for the future of wireless connectivity in industrial automation?
- How will connectivity strategies in industrial automation evolve in the future?

Table of Contents

About the Author

Johan Svanberg is a Senior Analyst with a Master's degree from Chalmers University of Technology. He joined Berg Insight in 2007 and his areas of expertise include connected wearables, Industrial Internet-of-Things and wireless M2M markets.

Berg Insight offers premier business intelligence to the telecom industry. We produce concise reports providing key facts and strategic insights about pivotal developments in our focus areas. Berg Insight also offers detailed market forecast databases and advisory services. Our vision is to be the most valuable source of intelligence for our customers.

Who should buy this report?

Industrial Automation and Wireless IoT is the foremost source of information about the adoption of wireless connectivity in the industrial automation sector. Whether you are a solution provider, device vendor, industrial automation player, telecom operator, investor, consultant, or government agency, you will gain valuable insights from our in-depth research.

Related products

- M2M Applications in the Oil and Gas Industry
- The Global Automotive OEM Telematics Market
- Fleet Management in the Americas
- The Global Wireless M2M Market

© Berg Insight AB - No. 142

Order form — TO RECEIVE YOUR COPY OF INDUSTRIAL AUTOMATION AND WIRELESS IOT

You can place your order in the following alternative ways:

1. Place your order online in our web shop at www.berginsight.com
2. Fax this order sheet to us at fax number: +46 31 711 30 96
3. Mail this order sheet to us at: Berg Insight AB, Viktoriagatan 3, 411 25 Gothenburg, Sweden
4. Email your order to: info@berginsight.com
5. Phone us at +46 31 711 30 91

Choose type of format

- ☐ Paper copy ..... 1000 EUR
- ☐ PDF 1-5 user license ..... 1500 EUR
- ☐ PDF corporate license..... 3000 EUR

Family/Surname | Forename | Position | Company

Address | Country | Postcode

Telephone | FAX | Email

VAT is chargeable on all orders from Sweden. Orders from all other countries in the European Union must include the buyer's VAT Registration number below in order to avoid the addition of VAT.

Your PO number | Your VAT/TVA/IVA/BTW/MWST number

Please charge my credit card

☐ VISA ☐ Mastercard

Card number | Expiry date (MM/YY) | CV code

Cardholder's name | Signature

Billing address

Postcode | Country

☐ We enclose our cheque payable to Berg Insight AB

☐ Please invoice me

Signature | Date

Reports will be dispatched once full payment has been received. For any enquiries regarding this, please contact us. Payment may be made by credit card, cheque made payable to Berg Insight AB, Viktoriagatan 3, 411 25 Gothenburg, Sweden or by direct bank transfer to Skandinaviska Enskilda Banken, 106 40 Stockholm, Sweden.

Account Holder: Berg Insight AB
Account number: 5011 10 402 80
BIC/SWIFT: ESSESESS
IBAN: SE92 5000 0000 0501 1104 0280

BERG INSIGHT