

Industrial Communication Market by Components (Switches, Gateways, Power Supply Devices, Router & WAP, Communication Interface & Protocol Converters, Controllers), Software, Services, Communication Protocol, Vertical and Region - Global Forecast to 2028

<https://marketpublishers.com/r/I126278D709EN.html>

Date: June 2023

Pages: 234

Price: US\$ 4,950.00 (Single User License)

ID: I126278D709EN

Abstracts

The global industrial communication market was valued at USD 21.9 billion in 2023 to USD 29.0 billion by 2028; it is expected to grow at a CAGR of 5.7% from 2023 to 2028. The automotive industry continues to evolve at an impressive pace with the adoption of automation and connectivity. In automotive manufacturing, Ethernet (IEEE 802.3) is a widely used protocol. In this industry, many processes are controlled through computers, and Ethernet is one of the most suitable protocols for computer-enabled communication. The technology is primarily used for diagnostics, machine control, factory automation, and connecting remote sensors. Furthermore, industrial communication plays an important role in increasing connectivity in electric vehicles (EVs) by facilitating communication between various components and systems in the vehicle. In EVs, there are several subsystems that need to communicate with each other, including the battery management system, motor controller, charging system, and various sensors and actuators.

Services offerings to exhibit higher CAGR in the industrial communication market during forecast period

Rapid changes in network infrastructure and the growing adoption of IIoT have led to the adoption of cloud and virtualization. This has significantly increased the pressure on network administrators to manage the network infrastructure. Hence, manufacturing

industries are outsourcing network services to ensure better network management quality and reduced operating costs. Also, post-COVID-19, most companies are adopting remote network monitoring services, which is expected to boost the services market during the forecast period.

Food and beverages vertical to exhibit higher CAGR in the industrial communication market

Among all industry verticals, the market for pharmaceuticals, food & beverages, and water & wastewater management segments is expected to grow at a significant CAGR during the forecast period. The post-COVID-19 scenario is expected to witness high demand for automation in the food & beverages industry to ensure minimum human intervention during the manufacturing and the processing of final products. This, in turn, is expected to lead to the demand for industrial communication systems to ensure the required productivity.

Asia Pacific accounted for largest share of the industrial communication market in 2022

Asia Pacific is a leading industrial hub for several industries, including automotive, electrical, and electronics. It is also the largest automobile producer in the world. In Asia Pacific, countries such as China, India, and South Korea are the leading manufacturers of consumer electronics devices, including smartphones, laptops, and gaming consoles. The large-scale development exhibited by the emerging economies in this region with the use of advanced technologies for manufacturing is contributing to the growth of the industrial communication market. Additionally, various initiatives undertaken by the governments of Asia Pacific countries to encourage the development of large and medium enterprises are also boosting the industrial communication market.

Breakdown of primaries

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type - Tier 1 – 25%, Tier 2 – 35%, Tier 3 – 40%

By Designation— C-level Executives - 40%, Managers - 30%, Others – 30%

By Region—North America - 42%, Europe - 25%, Asia Pacific - 21%, RoW - 12%

The industrial communication market is dominated by a few globally established players such as Cisco Systems, Inc. (US), Siemens (Germany), Rockwell Automation (US), OMRON Corporation (Japan), Moxa Inc. (Taiwan), Huawei Technologies Co., Ltd. (China), SICK AG (Germany), Schneider Electric (France), ABB (Switzerland), Belden Inc. (US), GE (France), Advantech Co., Ltd (Taiwan), FANUC CORPORATION (Japan), Bosch Rexroth AG (Germany), AAEON Technology Inc. (Taiwan), HMS Networks (Sweden), Honeywell International Inc. (US), Mitsubishi Electric Corporation (Japan), Ericsson (Sweden), Hans Turck GmbH & Co. KG (Germany), ACS Motion Control (Israel), Eaton (Ireland), Beckhoff Automation (Germany), Hitachi, Ltd. (Japan). The study includes an in-depth competitive analysis of these key players in the industrial communication market, with their company profiles, recent developments, and key market strategies.

Research Coverage:

The report segments the industrial communication market and forecasts its offering, communication protocol, by vertical, and by region. The report also discusses the drivers, restraints, opportunities, and challenges pertaining to the market. It gives a detailed view of the market across four main regions— North America, Europe, Asia Pacific, and RoW. Supply chain analysis has been included in the report, along with the key players and their competitive analysis in the industrial communication ecosystem.

Key Benefits to Buy the Report:

Analysis Of key drivers (Growing need for scalable, faster, reliable, and interoperable communication protocols, increasing use of digital twin to safely monitor smart manufacturing operations, increasing use of machine-to-machine communication technology, and initiatives undertaken by governments of different countries to promote adoption of industrial automation). Restraint (Absence of standardization in industrial communication protocols and interfaces). Opportunity (5G is offering lucrative opportunities for the growth of Industrial IoT and upsurge in demand for wireless networks). Challenges (Threats related to cybersecurity and harsh field site conditions such as high-voltage transients, severe shocks and vibrations, and extremely high temperatures).

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the industrial communication market.

Market Development: Comprehensive information about lucrative markets – the report analyses the industrial communication market across varied regions

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the industrial communication market.

Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Cisco Systems, Inc (US), Siemens (Germany), Rockwell Automation (US), OMRON Corporation (Japan), Moxa Inc. (Taiwan).

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 DEFINITION

1.2.1 INCLUSIONS AND EXCLUSIONS

1.3 STUDY SCOPE

1.3.1 MARKETS COVERED

FIGURE 1 INDUSTRIAL COMMUNICATIONS MARKET SEGMENTATION

1.3.2 REGIONAL SCOPE

1.3.3 YEARS CONSIDERED

1.4 CURRENCY CONSIDERED

1.5 LIMITATIONS

1.6 STAKEHOLDERS

1.7 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 2 INDUSTRIAL COMMUNICATIONS MARKET: RESEARCH DESIGN

2.1.1 SECONDARY AND PRIMARY RESEARCH

FIGURE 3 INDUSTRIAL COMMUNICATIONS MARKET: RESEARCH APPROACH

2.1.2 SECONDARY DATA

TABLE 1 MAJOR SECONDARY SOURCES

2.1.2.1 Key data from secondary sources

2.1.3 PRIMARY DATA

2.1.3.1 Primary interviews with experts

2.1.3.2 Key industry insights

2.1.3.3 Breakdown of primaries

2.2 MARKET SIZE ESTIMATION

2.2.1 BOTTOM-UP APPROACH

2.2.1.1 Approach to arrive at market size using bottom-up approach

FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH

FIGURE 5 MARKET SIZE ESTIMATION METHODOLOGY (APPROACH 1): BOTTOM-UP (SUPPLY-SIDE)—ILLUSTRATION OF REVENUE ESTIMATION OF KEY PLAYERS FROM SALES OF INDUSTRIAL COMMUNICATIONS OFFERINGS

2.2.2 TOP-DOWN APPROACH

2.2.2.1 Approach to arrive at market size using top-down approach (supply side)

FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH

FIGURE 7 SUPPLY-SIDE ANALYSIS: INDUSTRIAL COMMUNICATIONS MARKET
(1/2)

FIGURE 8 MARKET SIZE ESTIMATION METHODOLOGY (APPROACH 2): TOP-
DOWN (SUPPLY SIDE)—REVENUE GENERATED FROM INDUSTRIAL
COMMUNICATIONS OFFERINGS

2.3 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 9 DATA TRIANGULATION

2.4 RESEARCH ASSUMPTIONS

2.5 RISK ASSESSMENTS

TABLE 2 RESEARCH LIMITATIONS AND ASSOCIATED RISKS

2.6 RESEARCH LIMITATIONS

3 EXECUTIVE SUMMARY

FIGURE 10 INDUSTRIAL COMMUNICATIONS MARKET SIZE, 2019–2028

FIGURE 11 AUTOMOTIVE VERTICAL TO ACCOUNT FOR LARGEST SHARE OF
INDUSTRIAL COMMUNICATIONS MARKET IN 2023

FIGURE 12 INDUSTRIAL ETHERNET PROTOCOL TO DOMINATE INDUSTRIAL
COMMUNICATIONS MARKET IN 2023

FIGURE 13 COMPONENTS SEGMENT TO LEAD INDUSTRIAL COMMUNICATIONS
MARKET IN 2023

FIGURE 14 ASIA PACIFIC TO HOLD LARGEST SHARE OF INDUSTRIAL
COMMUNICATIONS MARKET IN 2023

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN INDUSTRIAL
COMMUNICATIONS MARKET

FIGURE 15 INCREASING DEMAND FOR INDUSTRIAL COMMUNICATIONS
SOLUTIONS IN PHARMACEUTICALS & MEDICAL DEVICES TO DRIVE MARKET
GROWTH DURING FORECAST PERIOD

4.2 INDUSTRIAL COMMUNICATIONS MARKET, BY OFFERING

FIGURE 16 INDUSTRIAL COMMUNICATIONS SERVICES MARKET TO EXHIBIT
HIGHEST CAGR DURING FORECAST PERIOD

4.3 INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL
AND VERTICAL

FIGURE 17 INDUSTRIAL ETHERNET PROTOCOL AND AUTOMOTIVE VERTICAL
TO DOMINATE GLOBAL INDUSTRIAL COMMUNICATIONS MARKET IN 2023

4.4 INDUSTRIAL COMMUNICATIONS MARKET, BY REGION

FIGURE 18 INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC TO RECORD HIGHEST CAGR DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 19 INDUSTRIAL COMMUNICATIONS MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

5.2.1 DRIVERS

FIGURE 20 INDUSTRIAL COMMUNICATIONS MARKET DRIVERS AND THEIR IMPACT

5.2.1.1 Growing need for scalable, faster, reliable, and interoperable communication protocols

5.2.1.1.1 Recent developments

5.2.1.2 Increasing use of digital twin technology to safely monitor smart manufacturing operations

5.2.1.2.1 Recent developments

5.2.1.3 Increasing deployment of machine-to-machine communications technology

5.2.1.3.1 Recent developments

5.2.1.4 Rising adoption of industrial automation supported by government initiatives

5.2.1.4.1 Recent developments

FIGURE 21 ANNUAL INSTALLATION COUNT OF INDUSTRIAL ROBOTS, BY COUNTRY, 2020 (THOUSAND UNITS)

5.2.1.5 Growing implementation of 5G technology in automotive, construction, and manufacturing

5.2.2 RESTRAINTS

FIGURE 22 INDUSTRIAL COMMUNICATIONS MARKET RESTRAINT AND ITS IMPACT

5.2.2.1 Lack of standardization in industrial communication protocols and interfaces

5.2.3 OPPORTUNITIES

FIGURE 23 INDUSTRIAL COMMUNICATIONS MARKET OPPORTUNITIES AND THEIR IMPACT

5.2.3.1 Lucrative opportunities offered by 5G for Industrial IoT development

5.2.3.1.1 Recent developments

5.2.3.2 Growing demand for wireless networks

5.2.4 CHALLENGES

FIGURE 24 INDUSTRIAL COMMUNICATIONS MARKET CHALLENGES AND THEIR

IMPACT

5.2.4.1 Threats related to cybersecurity

5.2.4.2 Harsh field site conditions such as high-voltage transients, severe shocks and vibrations, and extremely high temperatures

5.3 VALUE CHAIN ANALYSIS

FIGURE 25 INDUSTRIAL COMMUNICATIONS MARKET: VALUE CHAIN ANALYSIS

5.3.1 RESEARCH AND DEVELOPMENT

5.3.2 COMPONENT MANUFACTURERS/ODMS

5.3.3 SYSTEM INTEGRATORS/SOLUTIONS PROVIDERS

5.3.4 MARKETING AND SALES

5.3.5 POST-SALES SERVICES

5.3.6 END USER INDUSTRIES

5.4 PORTER'S FIVE FORCES ANALYSIS

FIGURE 26 PORTER'S FIVE FORCES ANALYSIS

TABLE 3 PORTER'S FIVE FORCES ANALYSIS: INDUSTRIAL COMMUNICATIONS MARKET

5.4.1 THREAT OF NEW ENTRANTS

5.4.2 THREAT OF SUBSTITUTES

5.4.3 BARGAINING POWER OF BUYERS

5.4.4 BARGAINING POWER OF SUPPLIERS

5.4.5 INTENSITY OF COMPETITIVE RIVALRY

5.5 KEY STAKEHOLDERS AND BUYING CRITERIA

5.5.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 27 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE VERTICALS

TABLE 4 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE VERTICALS (%)

5.5.2 BUYING CRITERIA

FIGURE 28 KEY BUYING CRITERIA FOR TOP THREE VERTICALS

TABLE 5 KEY BUYING CRITERIA FOR TOP THREE VERTICALS

5.6 PATENT ANALYSIS

TABLE 6 NUMBER OF PATENTS REGISTERED IN INDUSTRIAL COMMUNICATIONS MARKET IN LAST 10 YEARS

FIGURE 29 TOP 10 COMPANIES WITH HIGHEST NO. OF PATENT APPLICATIONS IN LAST 10 YEARS

FIGURE 30 NO. OF PATENTS GRANTED PER YEAR, 2013–2022

TABLE 7 PATENTS PERTAINING TO INDUSTRIAL COMMUNICATIONS, 2020–2022

5.7 TRADE ANALYSIS

5.7.1 IMPORT SCENARIO

TABLE 8 IMPORT DATA, BY COUNTRY, 2018–2022 (USD MILLION)

5.7.2 EXPORT SCENARIO

TABLE 9 EXPORT DATA, BY COUNTRY, 2018–2022 (USD MILLION)

5.8 TECHNOLOGY ANALYSIS

5.8.1 NEAR-FIELD COMMUNICATION (NFC)

5.8.2 TIME-SENSITIVE NETWORKING (TSN)

5.8.3 OPEN PLATFORM COMMUNICATION UNIFIED ARCHITECTURE (OPC UA)

5.8.4 VIRTUALIZATION

5.8.5 ETHERNET

5.9 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS

FIGURE 31 REVENUE SHIFT AND NEW REVENUE POCKETS FOR INDUSTRIAL COMMUNICATIONS MARKET PLAYERS

5.10 INDUSTRIAL COMMUNICATIONS MARKET ECOSYSTEM

FIGURE 32 INDUSTRIAL COMMUNICATIONS MARKET ECOSYSTEM

5.11 CASE STUDY

5.11.1 ADVANTECH'S EDGE SOLUTIONS ENABLE REAL-TIME OIL TANKER MONITORING

5.11.2 PULP MOLDING EQUIPMENT MANUFACTURER IMPLEMENTS ROCKWELL AUTOMATION'S SOLUTIONS

5.11.3 OSSID IMPROVES RELIABILITY AND PERFORMANCE OF MACHINERY USING MITSUBISHI ELECTRIC'S AUTOMATION PORTFOLIO

5.11.4 AUTOMOTIVE INSPECTION CENTER IMPLEMENTS ADVANTECH'S WISE-PAAS END-TO-CLOUD IOT TOTAL SOLUTION FOR REMOTE VIDEO SURVEILLANCE AND DEVICE STATUS MONITORING AND CONTROL

5.11.5 OPTIMA CONTROL SOLUTIONS AND ROCKWELL AUTOMATION PROVIDE AUTOMATED MONITORING SOLUTIONS TO BISCUIT MANUFACTURER

5.11.6 WIND POWER PLANT DEPLOYS ADVANTECH'S PLANT MONITORING SOLUTION

5.12 KEY CONFERENCES AND EVENTS, 2023–2024

TABLE 10 INDUSTRIAL COMMUNICATIONS MARKET: CONFERENCES AND EVENTS, 2023–2024

5.13 TARIFF AND REGULATORY LANDSCAPE

5.13.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 11 INDUSTRIAL COMMUNICATIONS MARKET: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.13.2 TARIFFS

5.13.3 STANDARDS

5.13.4 REGULATIONS

5.14 PRICING ANALYSIS

5.14.1 AVERAGE SELLING PRICE (ASP) TRENDS

FIGURE 33 INDICATIVE AVERAGE SELLING PRICE (ASP), BY COMPONENT TYPE

TABLE 12 PRICING ANALYSIS

6 INDUSTRIAL COMMUNICATIONS MARKET, BY OFFERING

6.1 INTRODUCTION

FIGURE 34 INDUSTRIAL COMMUNICATIONS MARKET, BY OFFERING

FIGURE 35 COMPONENTS TO ACCOUNT FOR LARGEST SIZE OF INDUSTRIAL COMMUNICATIONS MARKET IN 2028

TABLE 13 INDUSTRIAL COMMUNICATIONS MARKET, BY OFFERING, 2019–2022 (USD BILLION)

TABLE 14 INDUSTRIAL COMMUNICATIONS MARKET, BY OFFERING, 2023–2028 (USD BILLION)

6.2 COMPONENTS

TABLE 15 INDUSTRIAL COMMUNICATIONS MARKET, BY COMPONENT, 2019–2022 (USD MILLION)

TABLE 16 INDUSTRIAL COMMUNICATIONS MARKET, BY COMPONENT, 2023–2028 (USD MILLION)

6.2.1 SWITCHES

6.2.1.1 High security and durability allow switches to build reliable network connections between interconnected computers

6.2.2 GATEWAYS

6.2.2.1 Secure and efficient communications through gateways back Industry 4.0 and smart factory applications

6.2.3 ROUTERS & WAP

6.2.3.1 Compatibility with 5G technology in routers supports seamless industrial communications

6.2.4 CONTROLLERS & CONNECTORS

6.2.4.1 Determining priorities of tasks and interruptions make controllers vital for industrial communications systems

6.2.5 COMMUNICATION INTERFACES & CONVERTERS

6.2.5.1 Various protocols assist communication interfaces in communicating with different network devices

6.2.6 POWER SUPPLY DEVICES

6.2.6.1 High-performance integrated PMICS useful in communications power management

6.2.7 OTHERS

6.3 SOFTWARE

6.3.1 NETWORKING MANAGEMENT SOFTWARE OPTIMIZE NETWORK EFFICIENCY AND MINIMIZE TOTAL COST OF OWNERSHIP

6.4 SERVICES

6.4.1 INDUSTRIAL COMMUNICATIONS SERVICES SUPPORT INTEGRATION OF DEVICES, MACHINES, AND SYSTEMS WITHIN IIOT ECOSYSTEM

7 INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL

7.1 INTRODUCTION

FIGURE 36 INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL

FIGURE 37 INDUSTRIAL COMMUNICATIONS MARKET FOR WIRELESS COMMUNICATIONS PROTOCOL TO EXHIBIT HIGHEST CAGR DURING FORECAST PERIOD

TABLE 17 INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2019–2022 (USD MILLION)

TABLE 18 INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2023–2028 (USD MILLION)

7.2 FIELDBUS

TABLE 19 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 20 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 21 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN NORTH AMERICA, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 22 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN NORTH AMERICA, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 23 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN EUROPE, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 24 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN EUROPE, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 25 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 26 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 27 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN ROW, BY REGION, 2019–2022 (USD MILLION)

TABLE 28 FIELDBUS: INDUSTRIAL COMMUNICATIONS MARKET IN ROW, BY

REGION, 2023–2028 (USD MILLION)**7.2.1 PROFIBUS**

7.2.1.1 PROFIBUS links automation systems and controllers with decentralized field devices

7.2.2 MODBUS

7.2.2.1 Modbus runs over different communication media, including wired and wireless media and optical networks

7.2.3 CC-LINK

7.2.3.1 CC-Link integrates system control and communications

7.2.4 DEVICENET

7.2.4.1 DeviceNet facilitates communication between field-level and high-level devices

7.2.5 CANOPEN

7.2.5.1 CANopen implemented in embedded networking applications

7.2.6 OTHERS**7.3 INDUSTRIAL ETHERNET**

TABLE 29 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 30 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 31 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN NORTH AMERICA, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 32 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN NORTH AMERICA, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 33 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN EUROPE, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 34 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN EUROPE, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 35 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 36 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 37 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN ROW, BY REGION, 2019–2022 (USD MILLION)

TABLE 38 INDUSTRIAL ETHERNET: INDUSTRIAL COMMUNICATIONS MARKET IN ROW, BY REGION, 2023–2028 (USD MILLION)

7.3.1 PROFINET

7.3.1.1 PROFINET supplements existing PROFIBUS technologies by providing faster data communications

7.3.2 ETHERNET/IP

7.3.2.1 Ethernet/IP widely used in hybrid and process industries

7.3.3 ETHERCAT

7.3.3.1 EtherCAT specifically designed for fast control demand applications

7.3.4 MODBUS-TCP

7.3.4.1 MODBUS-TCP offers high level of interoperability for industrial communications network devices

7.3.5 POWERLINK

7.3.5.1 Ethernet Powerlink enables transfer of time-critical data in short duration

7.3.6 SERCOS III

7.3.6.1 SERCOS III provides low-latency data transfer

7.3.7 CC-LINK IE

7.3.7.1 CC-Link IE supports flexible wiring topologies, such as star, ring, and line configuration

7.4 WIRELESS

TABLE 39 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 40 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 41 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN NORTH AMERICA, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 42 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN NORTH AMERICA, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 43 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN EUROPE, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 44 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN EUROPE, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 45 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 46 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 47 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN ROW, BY REGION, 2019–2022 (USD MILLION)

TABLE 48 WIRELESS: INDUSTRIAL COMMUNICATIONS MARKET IN ROW, BY REGION, 2023–2028 (USD MILLION)

7.4.1 WLAN

7.4.1.1 WLAN provides wide area coverage and faster communications

7.4.2 ISA100.11A

7.4.2.1 ISA 100 operates in 2.4 MHz frequency range and supports up to 15 channels

7.4.3 CELLULAR

7.4.3.1 Cellular networks ideal for IIoT applications that require operations over long distances

7.4.4 ZIGBEE

7.4.4.1 Zigbee offers reliable, cost-effective, low-power network structure

7.4.5 WHART

7.4.5.1 WHART designed for field-level wireless communication requirements in process industries

7.4.6 OTHERS

8 INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL

8.1 INTRODUCTION

FIGURE 38 INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL

FIGURE 39 AUTOMOTIVE VERTICAL TO DOMINATE INDUSTRIAL COMMUNICATIONS MARKET IN 2023

TABLE 49 INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 50 INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

8.2 AUTOMOTIVE

8.2.1 INCREASED PENETRATION OF INDUSTRIAL COMMUNICATIONS SOLUTIONS IN AUTOMOTIVE MANUFACTURING TO DRIVE MARKET

TABLE 51 AUTOMOTIVE: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 52 AUTOMOTIVE: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.3 ELECTRICAL & ELECTRONICS

8.3.1 NEED TO REDUCE DOWNTIME IN ELECTRONICS MANUFACTURING TO FUEL MARKET GROWTH

TABLE 53 ELECTRICAL & ELECTRONICS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 54 ELECTRICAL & ELECTRONICS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.4 AEROSPACE & DEFENSE

8.4.1 IMPLEMENTATION OF INDUSTRIAL COMMUNICATIONS TO ENSURE EFFECTIVE MANUFACTURING PROCESSES TO DRIVE MARKET

TABLE 55 AEROSPACE & DEFENSE: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 56 AEROSPACE & DEFENSE: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.5 OIL & GAS

8.5.1 INCREASING OFFSHORE OIL & GAS ACTIVITIES TO LEAD TO RISING ADOPTION OF AUTOMATION SOLUTIONS

TABLE 57 OIL & GAS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 58 OIL & GAS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.6 CHEMICALS & FERTILIZERS

8.6.1 HIGH SAFETY LEVELS REQUIRED IN CHEMICAL INDUSTRY TO PROPEL MARKET GROWTH FOR INDUSTRIAL COMMUNICATIONS

TABLE 59 CHEMICALS & FERTILIZERS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 60 CHEMICALS & FERTILIZERS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.7 FOOD & BEVERAGES

8.7.1 RAPID PENETRATION OF AUTOMATION IN FOOD & BEVERAGES INDUSTRY TO DRIVE DEMAND FOR INDUSTRIAL COMMUNICATIONS SOLUTIONS

TABLE 61 FOOD & BEVERAGES: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 62 FOOD & BEVERAGES: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.8 PHARMACEUTICALS & MEDICAL DEVICES

8.8.1 ADOPTION OF AUTOMATION AND SENSING TECHNOLOGIES IN PHARMACEUTICAL INDUSTRY TO BOOST MARKET GROWTH

TABLE 63 PHARMACEUTICALS & MEDICAL DEVICES: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 64 PHARMACEUTICALS & MEDICAL DEVICES: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.9 ENERGY & POWER

8.9.1 DEMAND FOR COMMUNICATIONS NETWORKS FOR DATA RETRIEVAL IN ENERGY & POWER PLANTS TO DRIVE MARKET

TABLE 65 ENERGY & POWER: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 66 ENERGY & POWER: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.10 METALS & MINING

8.10.1 ENSURING WORKER SAFETY IN MINING INDUSTRY TO LEAD TO MARKET GROWTH

TABLE 67 METALS & MINING: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 68 METALS & MINING: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.11 ENGINEERING/FABRICATION

8.11.1 NETWORKING TECHNOLOGIES ENSURE CONSISTENT AND UNINTERRUPTED CONNECTIVITY FOR WORKERS IN FABRICATION PLANTS

TABLE 69 ENGINEERING/FABRICATION: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 70 ENGINEERING/FABRICATION: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.12 WATER & WASTEWATER MANAGEMENT

8.12.1 LOW-COST, LOW-POWER SENSORS AND EDGE-COMPUTING DEVICES TO INCREASE EFFICIENCY TO FUEL MARKET GROWTH

TABLE 71 WATER & WASTEWATER MANAGEMENT: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 72 WATER & WASTEWATER MANAGEMENT: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

8.13 OTHERS

TABLE 73 OTHERS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 74 OTHERS: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD MILLION)

9 INDUSTRIAL COMMUNICATIONS MARKET, BY REGION

9.1 INTRODUCTION

FIGURE 40 INDUSTRIAL COMMUNICATIONS MARKET IN ASIA PACIFIC TO RECORD HIGHEST CAGR DURING 2023–2028

TABLE 75 INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2019–2022 (USD BILLION)

TABLE 76 INDUSTRIAL COMMUNICATIONS MARKET, BY REGION, 2023–2028 (USD BILLION)

9.2 NORTH AMERICA

TABLE 77 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2019–2022 (USD MILLION)

TABLE 78 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET, BY

COMMUNICATION PROTOCOL, 2023–2028 (USD MILLION)

TABLE 79 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 80 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 81 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 82 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

FIGURE 41 NORTH AMERICA: INDUSTRIAL COMMUNICATIONS MARKET SNAPSHOT

9.2.1 US

9.2.1.1 Ideal environment for innovation to facilitate massive advancements in industrial communications

9.2.2 CANADA

9.2.2.1 Growing investments in automated manufacturing technologies for process and discrete industries to contribute to market growth

9.2.3 MEXICO

9.2.3.1 Deployment of 5G for industrial communications to support market growth

9.3 EUROPE

FIGURE 42 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET SNAPSHOT

TABLE 83 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2019–2022 (USD MILLION)

TABLE 84 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2023–2028 (USD MILLION)

TABLE 85 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 86 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 87 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 88 EUROPE: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL 2023–2028 (USD MILLION)

9.3.1 UK

9.3.1.1 Increasing adoption of automation in manufacturing to fuel market growth

9.3.2 GERMANY

9.3.2.1 Growing demand for industrial communications solutions in automotive industry to propel market growth

9.3.3 FRANCE

9.3.3.1 Government initiatives promoting adoption of advanced technologies to drive market

9.3.4 SPAIN

9.3.4.1 Demand for industrial communications offerings from automobile industry to boost market growth

9.3.5 ITALY

9.3.5.1 Automobile manufacturing to fuel growth of industrial communications market

9.3.6 REST OF EUROPE

9.4 ASIA PACIFIC

FIGURE 43 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET SNAPSHOT

TABLE 89 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2019–2022 (USD MILLION)

TABLE 90 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2023–2028 (USD MILLION)

TABLE 91 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 92 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 93 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2019–2022 (USD MILLION)

TABLE 94 ASIA PACIFIC: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL, 2023–2028 (USD MILLION)

9.4.1 CHINA

9.4.1.1 Surging use of industrial communications solutions in automotive sector to propel market growth

9.4.2 JAPAN

9.4.2.1 Ongoing technological developments in different industries to lead to deployment of advanced automation solutions

9.4.3 INDIA

9.4.3.1 Increasing government investments in industrial automation to drive market

9.4.4 SOUTH KOREA

9.4.4.1 Robust manufacturing sector to boost adoption of industrial communications solutions

9.4.5 REST OF ASIA PACIFIC

9.5 REST OF THE WORLD (ROW)

TABLE 95 ROW: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2019–2022 (USD MILLION)

TABLE 96 ROW: INDUSTRIAL COMMUNICATIONS MARKET, BY COMMUNICATION PROTOCOL, 2023–2028 (USD MILLION)

TABLE 97 ROW: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION,
2019–2022 (USD MILLION)

TABLE 98 ROW: INDUSTRIAL COMMUNICATIONS MARKET, BY REGION,
2023–2028 (USD MILLION)

TABLE 99 ROW: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL,
2019–2022 (USD MILLION)

TABLE 100 ROW: INDUSTRIAL COMMUNICATIONS MARKET, BY VERTICAL,
2023–2028 (USD MILLION)

9.5.1 LATIN AMERICA

9.5.1.1 Rising deployment of factory automation solutions in different industries to
boost market growth

9.5.2 MIDDLE EAST

9.5.2.1 Increasing adoption of automation solutions in oil & gas industry to drive
market

9.5.3 AFRICA

9.5.3.1 Growing industrialization to increase demand for industrial communications

10 COMPETITIVE LANDSCAPE

10.1 OVERVIEW

10.2 MARKET EVALUATION FRAMEWORK

TABLE 101 OVERVIEW OF STRATEGIES ADOPTED BY TOP FIVE
MANUFACTURERS IN INDUSTRIAL COMMUNICATIONS MARKET FROM 2020 TO
2023

10.2.1 PRODUCT PORTFOLIO

10.2.2 REGIONAL FOCUS

10.2.3 MANUFACTURING FOOTPRINT

10.2.4 ORGANIC/INORGANIC GROWTH STRATEGIES

10.3 INDUSTRIAL COMMUNICATIONS MARKET: MARKET SHARE ANALYSIS, 2022

TABLE 102 INDUSTRIAL COMMUNICATIONS MARKET: MARKET SHARE
ANALYSIS (2022)

10.4 FIVE-YEAR COMPANY REVENUE ANALYSIS

FIGURE 44 FIVE-YEAR REVENUE ANALYSIS OF TOP FIVE PLAYERS

10.5 KEY COMPANY EVALUATION MATRIX, 2022

10.5.1 STARS

10.5.2 EMERGING LEADERS

10.5.3 PERVASIVE PLAYERS

10.5.4 PARTICIPANTS

FIGURE 45 INDUSTRIAL COMMUNICATIONS MARKET: KEY COMPANY

EVALUATION MATRIX, 2022**10.6 COMPANY FOOTPRINT**

TABLE 103 OVERALL COMPANY FOOTPRINT (25 PLAYERS)

TABLE 104 COMPANY FOOTPRINT, BY OFFERING (25 PLAYERS)

TABLE 105 COMPANY FOOTPRINT, BY VERTICAL (25 PLAYERS)

TABLE 106 COMPANY FOOTPRINT, BY REGION (25 PLAYERS)

10.7 START-UPS/SMES EVALUATION MATRIX, 2022

10.7.1 PROGRESSIVE COMPANIES

10.7.2 RESPONSIVE COMPANIES

10.7.3 DYNAMIC COMPANIES

10.7.4 STARTING BLOCKS

**FIGURE 46 INDUSTRIAL COMMUNICATIONS MARKET: START-UPS/SMES
EVALUATION MATRIX, 2022**

10.7.5 COMPETITIVE BENCHMARKING

**TABLE 107 INDUSTRIAL COMMUNICATIONS MARKET: DETAILED LIST OF KEY
START-UPS/SMES****TABLE 108 INDUSTRIAL COMMUNICATIONS MARKET: COMPETITIVE
BENCHMARKING OF START-UPS/SMES****10.8 COMPETITIVE SCENARIOS AND TRENDS**

10.8.1 PRODUCT LAUNCHES

TABLE 109 PRODUCT LAUNCHES, 2020–2023

10.8.2 DEALS

TABLE 110 DEALS, 2020–2023

10.8.3 OTHERS

TABLE 111 OTHERS, 2020–2023

11 COMPANY PROFILES**11.1 KEY PLAYERS**

(Business overview, Products/Services/Solutions offered, Recent developments, MnM view, Key strengths/Right to win, Strategic choices, and Weaknesses/Competitive threats)*

11.1.1 CISCO SYSTEMS, INC.

TABLE 112 CISCO SYSTEMS, INC.: COMPANY OVERVIEW

FIGURE 47 CISCO SYSTEMS, INC.: COMPANY SNAPSHOT

TABLE 113 CISCO SYSTEMS, INC.: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 114 CISCO SYSTEMS, INC.: PRODUCT LAUNCHES

TABLE 115 CISCO SYSTEMS, INC.: DEALS

11.1.2 SIEMENS

TABLE 116 SIEMENS: COMPANY OVERVIEW

FIGURE 48 SIEMENS: COMPANY SNAPSHOT

TABLE 117 SIEMENS: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 118 SIEMENS: PRODUCT LAUNCHES

TABLE 119 SIEMENS: DEALS

11.1.3 ROCKWELL AUTOMATION

TABLE 120 ROCKWELL AUTOMATION: COMPANY OVERVIEW

FIGURE 49 ROCKWELL AUTOMATION: COMPANY SNAPSHOT

TABLE 121 ROCKWELL AUTOMATION: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 122 ROCKWELL AUTOMATION: PRODUCT LAUNCHES

TABLE 123 ROCKWELL AUTOMATION: DEALS

11.1.4 OMRON CORPORATION

TABLE 124 OMRON CORPORATION: COMPANY OVERVIEW

FIGURE 50 OMRON CORPORATION: COMPANY SNAPSHOT

TABLE 125 OMRON CORPORATION: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 126 OMRON CORPORATION: PRODUCT LAUNCHES

TABLE 127 OMRON CORPORATION: DEALS

11.1.5 MOXA INC.

TABLE 128 MOXA INC.: COMPANY OVERVIEW

TABLE 129 MOXA INC.: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 130 MOXA INC.: PRODUCT LAUNCHES

TABLE 131 MOXA INC.: DEALS

11.1.6 HUAWEI TECHNOLOGIES CO., LTD.

TABLE 132 HUAWEI TECHNOLOGIES CO., LTD.: COMPANY OVERVIEW

FIGURE 51 HUAWEI TECHNOLOGIES CO., LTD.: COMPANY SNAPSHOT

TABLE 133 HUAWEI TECHNOLOGIES CO., LTD.: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 134 HUAWEI TECHNOLOGIES CO., LTD.: PRODUCT LAUNCHES

TABLE 135 HUAWEI TECHNOLOGIES CO., LTD.: DEALS

TABLE 136 HUAWEI TECHNOLOGIES CO., LTD.: OTHERS

11.1.7 SICK AG

TABLE 137 SICK AG: COMPANY OVERVIEW

FIGURE 52 SICK AG: COMPANY SNAPSHOT

TABLE 138 SICK AG: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 139 SICK AG: PRODUCT LAUNCHES

TABLE 140 SICK AG: DEALS

TABLE 141 SICK AG: OTHERS

11.1.8 SCHNEIDER ELECTRIC

TABLE 142 SCHNEIDER ELECTRIC: COMPANY OVERVIEW

FIGURE 53 SCHNEIDER ELECTRIC: COMPANY SNAPSHOT

TABLE 143 SCHNEIDER ELECTRIC: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 144 SCHNEIDER ELECTRIC: DEALS

TABLE 145 SCHNEIDER ELECTRIC: OTHERS

11.1.9 ABB

TABLE 146 ABB: COMPANY OVERVIEW

FIGURE 54 ABB: COMPANY SNAPSHOT

TABLE 147 ABB: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 148 ABB: DEALS

TABLE 149 ABB: OTHERS

11.1.10 BELDEN INC.

TABLE 150 BELDEN INC.: COMPANY OVERVIEW

FIGURE 55 BELDEN INC.: COMPANY SNAPSHOT

TABLE 151 BELDEN INC.: PRODUCT/SERVICE/SOLUTION OFFERED

TABLE 152 BELDEN INC.: PRODUCT LAUNCHES

TABLE 153 BELDEN INC.: DEALS

11.2 OTHER PLAYERS

11.2.1 GE

11.2.2 ADVANTECH CO., LTD.

11.2.3 IFM ELECTRONIC GMBH

11.2.4 FANUC CORPORATION

11.2.5 BOSCH REXROTH AG

11.2.6 AAEON TECHNOLOGY INC.

11.2.7 HMS NETWORKS

11.2.8 HONEYWELL INTERNATIONAL INC.

11.2.9 MITSUBISHI ELECTRIC CORPORATION

11.2.10 TELEFONAKTIEBOLAGET LM ERICSSON

11.2.11 HANS TURCK GMBH & CO. KG

11.2.12 ACS MOTION CONTROL

11.2.13 EATON

11.2.14 BECKHOFF AUTOMATION

11.2.15 HITACHI, LTD.

*Details on Business overview, Products/Services/Solutions offered, Recent developments, MnM view, Key strengths/Right to win, Strategic choices, and Weaknesses/Competitive threats might not be captured in case of unlisted companies.

12 APPENDIX

12.1 DISCUSSION GUIDE

12.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

12.3 CUSTOMIZATION OPTIONS

12.4 RELATED REPORTS

12.5 AUTHOR DETAILS

I would like to order

Product name: Industrial Communication Market by Components (Switches, Gateways, Power Supply Devices, Router & WAP, Communication Interface & Protocol Converters, Controllers), Software, Services, Communication Protocol, Vertical and Region - Global Forecast to 2028

Product link: <https://marketpublishers.com/r/l126278D709EN.html>

Price: US\$ 4,950.00 (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/l126278D709EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970