

Functional Safety Market Size, Share, and Analysis, By Safety System (BMS, TMS, HIPPS, Fire & Gas Monitoring Control System, ESD, SCADA, and DCS), By Device (Safety Sensors, Safety Controllers, Safety Switches, Programmable Safety Systems, Emergency Stop Devices, and Final Control Elements), By Sales Channel (Direct and Indirect), By SIL Type (SIL 1, SIL 2, SIL 3, and SIL 4), By End User (Oil & Gas, Food & Beverage, Power Generation, Automotive and Transportation, and Pharmaceutical), By Region (North America, Europe, Asia-Pacific, And Rest of the World) And Regional Forecast 2024-2034

<https://marketpublishers.com/r/F297F49C0560EN.html>

Date: September 2024

Pages: 580

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

ID: F297F49C0560EN

Abstracts

Functional Safety Market Size, Share, and Analysis, By Safety System (BMS, TMS, HIPPS, Fire & Gas Monitoring Control System, ESD, SCADA, and DCS), By Device (Safety Sensors, Safety Controllers, Safety Switches, Programmable Safety Systems, Emergency Stop Devices, and Final Control Elements), By Sales Channel (Direct and Indirect), By SIL Type (SIL 1, SIL 2, SIL 3, and SIL 4), By End User (Oil & Gas, Food & Beverage, Power Generation, Automotive and Transportation, and Pharmaceutical), By Region (North America, Europe, Asia-Pacific, And Rest of the World) And Regional Forecast 2024-2034

PRODUCT OVERVIEW

Functional Safety Market is anticipated to grow at a CAGR of 9.5% in the forecast period (2024-2034), with the market size valued at USD 5.7 billion in 2023 and projected to reach USD 15.5 billion by 2034.

Functional safety is an important part that ensure the reliability and safety of complex systems across industries like automotive, manufacturing, and energy. It includes taking necessary steps to detect and reduce potential risks, thus lowering the risk of damage to individuals and assets. Functional safety standards, such as ISO 26262 and IEC 61508, establish guidelines for the development and evaluation of safety-related systems and components. These standards define the criteria for the safety lifecycle, which includes design, operation, and maintenance. Furthermore, functional safety includes important aspects like hazard analysis, calculating the safety integrity level, and implementing safety-related control systems. Thus, as industries become increasingly automated and digital, the demand for functional safety solutions will encourage innovation and improvements in safety technologies.

MARKET HIGHLIGHTS

Functional safety market is anticipated to reach USD 15.5 billion, growing at a CAGR of 9.5% during the forecast period, owing to strict regulations mandating safety standards across industries, which encourages the use of functional safety measures. The increasing complexity and automation of industrial processes increase the need for safety measures to reduce these risks effectively. Moreover, growing awareness of workplace safety and the possible consequences of accidents is responsible for driving the demand for functional safety solutions. In addition, developments in sensor technology, along with software and communication help in improving the reliability of safety systems. Thus, the functional safety market is likely to grow due to the constant evolution of technology and focus on safety in many industries.

Functional Safety Market Segments:

By Safety System

BMS

TMS

HIPPS

Fire & Gas Monitoring Control System

ESD

SCADA

DCS

By Device

Safety Sensors

Safety Controllers

Safety Switches

Programmable Safety Systems

Emergency Stop Devices

Final Control Elements

By Sales Channel

Direct

Indirect

By SIL Type

SIL 1

SIL 2

SIL 3

SIL 4

By End User

Oil & Gas

Food & Beverage

Power Generation

Automotive and Transportation

Pharmaceutical

MARKET DYNAMICS

Growth Drivers

Increasing Emphasis on Safety Regulations in Various Industries Is Expected to Promote Market Growth and Development

Growing Adoption of Automation and Complex Machinery has Raised the Need for Functional Safety Solutions

Restraint

High Initial Investment Costs to Act as a Major Challenge in the Market

Key Players

ABB Group

Emerson Electric Co.

Schneider Electric SE

Honeywell International Inc.

Omron Corporation

Siemens AG

Rockwell Automation, Inc.

General Electric Company

Yokogawa Electric Corporation

Mitsubishi Electric Corporation

Pilz GmbH & Co. KG

Balluff GmbH

HIMA Paul Hildebrandt GmbH

Pepperl+Fuchs GmbH

B&R Industrial Automation GmbH

Other Prominent Players (Company Overview, Business Strategy, Key Product Offerings, Financial Performance, Key Performance Indicators, Risk Analysis, Recent Development, Regional Presence, SWOT Analysis)

Global Laboratory Temperature Control Units Market is further segmented by region into:

North America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United States and Canada

Latin America Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – Mexico, Argentina, Brazil and Rest of Latin America

Europe Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – United Kingdom, France, Germany, Italy, Spain, Belgium, Hungary, Luxembourg, Netherlands, Poland, NORDIC, Russia, Turkey and Rest of Europe

Asia Pacific Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR –

India, China, South Korea, Japan, Malaysia, Indonesia, New Zealand, Australia and Rest of APAC

Middle East and Africa Market Size, Share, Trends, Opportunities, Y-o-Y Growth, CAGR – North Africa, Israel, GCC, South Africa and Rest of MENA

Reasons to Purchase this Report

Qualitative and quantitative analysis of the market based on segmentation involving both economic as well as non-economic factors

Provision of market value (USD Billion) data for each segment and sub-segment

Indicates the region and segment that is expected to witness the fastest growth as well as to dominate the market

Analysis by geography highlighting the consumption of the product/service in the region as well as indicating the factors that are affecting the market within each region

Competitive landscape which incorporates the market ranking of the major players, along with new service/product launches, partnerships, business expansions, and acquisitions in the past five years of companies profiled

Extensive company profiles comprising of company overview, company insights, product benchmarking, and SWOT analysis for the major market players

The current as well as the future market outlook of the industry with respect to recent developments which involve growth opportunities and drivers as well as challenges and restraints of both emerging as well as developed regions

Includes in-depth analysis of the market of various perspectives through Porter's five forces analysis

Provides insight into the market through Value Chain

Market dynamics scenario, along with growth opportunities of the market in the years to come

3-month post-sales analyst support.

Contents

1. EXECUTIVE SUMMARY

- 1.1. Regional Market Share
- 1.2. Business Trends
- 1.3. Functional Safety Market: COVID-19 Outbreak
- 1.4. Regional Trends
- 1.5. Segmentation Snapshot

2. RESEARCH METHODOLOGY

- 2.1. Research Objective
- 2.2. Research Approach
- 2.3. Data Sourcing and Methodology
- 2.4. Primary Research
- 2.5. Secondary Research
 - 2.5.1. Paid Sources
 - 2.5.2. Public Sources
- 2.6. Market Size Estimation and Data Triangulation

3. MARKET CHARACTERISTICS

- 3.1. Market Definition
- 3.2. Functional Safety Market: COVID-19 Impact
- 3.3. Key Segmentations
- 3.4. Key Developments
- 3.5. Allied Industry Data

4. FUNCTIONAL SAFETY MARKET – INDUSTRY INSIGHTS

- 4.1. Industry Segmentation
- 4.2. COVID-19 overview on world economy
- 4.3. Industry ecosystem Channel analysis
- 4.4. Innovation & Sustainability

5. MACROECONOMIC INDICATORS

6. RECENT DEVELOPMENTS

7.MARKET DYNAMICS

- 7.1. Introduction
- 7.2. Growth Drivers
- 7.3. Market Opportunities
- 7.4. Market Restraints
- 7.5. Market Trends

8. RISK ANALYSIS

9. MARKET ANALYSIS

- 9.1. Porters Five Forces
- 9.2. PEST Analysis
 - 9.2.1. Political
 - 9.2.2. Economic
 - 9.2.3. Social
 - 9.2.4. Technological

10. FUNCTIONAL SAFETY MARKET

- 10.1. Overview
- 10.2. Historical Analysis (2019-2022)
 - 10.2.1. Market Size, Y-o-Y Growth (%) and Market Forecast

11.FUNCTIONAL SAFETY MARKET SIZE & FORECAST 2024A-2034F

- 11.1. Overview
- 11.2. Key Findings
- 11.3. Market Segmentation
 - 11.3.1. By Safety System
 - 11.3.1.1. BMS
 - 11.3.1.1.1. By Value (USD Million) 2024-2034F
 - 11.3.1.1.2. Market Share (%) 2024-2034F
 - 11.3.1.1.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.1.2. TMS
 - 11.3.1.2.1. By Value (USD Million) 2024-2034F
 - 11.3.1.2.2. Market Share (%) 2024-2034F

- 11.3.1.2.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.1.3.HIPPS
 - 11.3.1.3.1.By Value (USD Million) 2024-2034F
 - 11.3.1.3.2. Market Share (%) 2024-2034F
 - 11.3.1.3.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.1.4.Fire & Gas Monitoring Control System
 - 11.3.1.4.1.By Value (USD Million) 2024-2034F
 - 11.3.1.4.2. Market Share (%) 2024-2034F
 - 11.3.1.4.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.1.5.ESD
 - 11.3.1.5.1.By Value (USD Million) 2024-2034F
 - 11.3.1.5.2. Market Share (%) 2024-2034F
 - 11.3.1.5.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.1.6.SCADA
 - 11.3.1.6.1.By Value (USD Million) 2024-2034F
 - 11.3.1.6.2. Market Share (%) 2024-2034F
 - 11.3.1.6.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.1.7.DCS
 - 11.3.1.7.1.By Value (USD Million) 2024-2034F
 - 11.3.1.7.2. Market Share (%) 2024-2034F
 - 11.3.1.7.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.2. By Device
 - 11.3.2.1.Safety Sensors
 - 11.3.2.1.1.By Value (USD Million) 2024-2034F
 - 11.3.2.1.2. Market Share (%) 2024-2034F
 - 11.3.2.1.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.2.2. Safety Controllers
 - 11.3.2.2.1. By Value (USD Million) 2024-2034F
 - 11.3.2.2.2.Market Share (%) 2024-2034F
 - 11.3.2.2.3.Y-o-Y Growth (%) 2024-2034F
 - 11.3.2.3. Safety Switches
 - 11.3.2.3.1. By Value (USD Million) 2024-2034F
 - 11.3.2.3.2.Market Share (%) 2024-2034F
 - 11.3.2.3.3.Y-o-Y Growth (%) 2024-2034F
 - 11.3.2.4. Programmable Safety Systems
 - 11.3.2.4.1. By Value (USD Million) 2024-2034F
 - 11.3.2.4.2.Market Share (%) 2024-2034F
 - 11.3.2.4.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.2.5. Emergency Stop Devices

- 11.3.2.5.1. By Value (USD Million) 2024-2034F
- 11.3.2.5.2. Market Share (%) 2024-2034F
- 11.3.2.5.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.2.6. Final Control Elements
 - 11.3.2.6.1. By Value (USD Million) 2024-2034F
 - 11.3.2.6.2. Market Share (%) 2024-2034F
 - 11.3.2.6.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.3. By Sales Channel
 - 11.3.3.1. Direct
 - 11.3.3.1.1. By Value (USD Million) 2024-2034F
 - 11.3.3.1.2. Market Share (%) 2024-2034F
 - 11.3.3.1.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.3.2. Indirect
 - 11.3.3.2.1. By Value (USD Million) 2024-2034F
 - 11.3.3.2.2. Market Share (%) 2024-2034F
 - 11.3.3.2.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.4. By SIL Type
 - 11.3.4.1. SIL
 - 11.3.4.1.1. By Value (USD Million) 2024-2034F
 - 11.3.4.1.2. Market Share (%) 2024-2034F
 - 11.3.4.1.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.4.2. SIL
 - 11.3.4.2.1. By Value (USD Million) 2024-2034F
 - 11.3.4.2.2. Market Share (%) 2024-2034F
 - 11.3.4.2.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.4.3. SIL
 - 11.3.4.3.1. By Value (USD Million) 2024-2034F
 - 11.3.4.3.2. Market Share (%) 2024-2034F
 - 11.3.4.3.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.4.4. SIL
 - 11.3.4.4.1. By Value (USD Million) 2024-2034F
 - 11.3.4.4.2. Market Share (%) 2024-2034F
 - 11.3.4.4.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.5. By End User
 - 11.3.5.1. Oil & Gas
 - 11.3.5.1.1. By Value (USD Million) 2024-2034F
 - 11.3.5.1.2. Market Share (%) 2024-2034F
 - 11.3.5.1.3. Y-o-Y Growth (%) 2024-2034F
 - 11.3.5.2. Food & Beverage

- 11.3.5.2.1. By Value (USD Million) 2024-2034F
- 11.3.5.2.2. Market Share (%) 2024-2034F
- 11.3.5.2.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.5.3. Power Generation
 - 11.3.5.3.1. By Value (USD Million) 2024-2034F
 - 11.3.5.3.2. Market Share (%) 2024-2034F
 - 11.3.5.3.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.5.4. Automotive and Transportation
 - 11.3.5.4.1. By Value (USD Million) 2024-2034F
 - 11.3.5.4.2. Market Share (%) 2024-2034F
 - 11.3.5.4.3. Y-o-Y Growth (%) 2024-2034F
- 11.3.5.5. Pharmaceutical
 - 11.3.5.5.1. By Value (USD Million) 2024-2034F
 - 11.3.5.5.2. Market Share (%) 2024-2034F
 - 11.3.5.5.3. Y-o-Y Growth (%) 2024-2034F

12. NORTH AMERICA FUNCTIONAL SAFETY MARKET SIZE & FORECAST 2024A-2034F

- 12.1. Overview
- 12.2. Key Findings
- 12.3. Market Segmentation
 - 12.3.1. By Safety Systems
 - 12.3.2. By Device
 - 12.3.3. By Sales Channel
 - 12.3.4. By SIL Type
 - 12.3.5. By End User
- 12.4. Country
 - 12.4.1. United States
 - 12.4.2. Canada

13. EUROPE FUNCTIONAL SAFETY MARKET SIZE & FORECAST 2024A-2034F

- 13.1. Overview
- 13.2. Key Findings
- 13.3. Market Segmentation
 - 13.3.1. By Safety Systems
 - 13.3.2. By Device
 - 13.3.3. By Sales Channel

- 13.3.4.By SIL Type
- 13.3.5.By End User
- 13.4. Country
 - 13.4.1.Germany
 - 13.4.2.United Kingdom
 - 13.4.3.France
 - 13.4.4. Italy
 - 13.4.5.Spain
 - 13.4.6.Russia
 - 13.4.7.Rest of Europe (BENELUX, NORDIC, Hungary, Turkey & Poland)

14. ASIA-PACIFIC FUNCTIONAL SAFETY MARKET SIZE & FORECAST 2024A-2034F

- 14.1.Overview
- 14.2. Key Findings
- 14.3. Market Segmentation
 - 14.3.1. By Safety Systems
 - 14.3.2.By Device
 - 14.3.3.By Sales Channel
 - 14.3.4. By SIL Type
 - 14.3.5.By End User
- 14.4. Country
 - 14.4.1. India
 - 14.4.2.China
 - 14.4.3. South Korea
 - 14.4.4. Japan
 - 14.4.5. Rest of APAC

15. MIDDLE EAST AND AFRICA FUNCTIONAL SAFETY MARKET SIZE & FORECAST 2024A-2034F

- 15.1.Overview
- 15.2. Key Findings
- 15.3. Market Segmentation
 - 15.3.1. By Safety Systems
 - 15.3.2.By Device
 - 15.3.3.By Sales Channel
 - 15.3.4.By SIL Type

- 15.3.5.By End User
- 15.4. Country
 - 15.4.1. Israel
 - 15.4.2.GCC
 - 15.4.3.North Africa
 - 15.4.4. South Africa
 - 15.4.5.Rest of Middle East and Africa

16. LATIN AMERICA FUNCTIONAL SAFETY MARKET SIZE & FORECAST 2024A-2034F

- 16.1. Overview
- 16.2. Key Findings
- 16.3. Market Segmentation
 - 16.3.1.By Safety Systems
 - 16.3.2. By Device
 - 16.3.3.By Sales Channel
 - 16.3.4.By SIL Type
 - 16.3.5.By End User
- 16.4. Country
 - 16.4.1. Mexico
 - 16.4.2.Brazil
 - 16.4.3.Rest of Latin America

17. COMPETITIVE LANDSCAPE

- 17.1. Company market share, 2023
- 17.2.Key player overview
- 17.3. Key stakeholders

18. COMPANY PROFILES

- 18.1.ABB Group
 - 18.1.1.Company Overview
 - 18.1.2.Financial Overview
 - 18.1.3.Key Product; Analysis
 - 18.1.4.Company Assessment
 - 18.1.4.1.Product Portfolio
 - 18.1.4.2. Key Clients

18.1.4.3. Market Share

18.1.4.4. Recent News & Development (Last 3 Yrs.)

18.1.4.5. Executive Team

18.2. Emerson Electric Co.

18.3. Schneider Electric SE

18.4. Honeywell International Inc.

18.5. Omron Corporation

18.6. Siemens AG

18.7. Rockwell Automation, Inc.

18.8. General Electric Company

18.9. Yokogawa Electric Corporation

18.10. Mitsubishi Electric Corporation

18.11. Pilz GmbH & Co. KG

18.12. Balluff GmbH

18.13. HIMA Paul Hildebrandt GmbH

18.14. Pepperl+Fuchs GmbH

18.15. B&R Industrial Automation GmbH

18.16. Other Prominent Players

19. APPENDIX

20. CONSULTANT RECOMMENDATION

I would like to order

Product name: Functional Safety Market Size, Share, and Analysis, By Safety System (BMS, TMS, HIPPS, Fire & Gas Monitoring Control System, ESD, SCADA, and DCS), By Device (Safety Sensors, Safety Controllers, Safety Switches, Programmable Safety Systems, Emergency Stop Devices, and Final Control Elements), By Sales Channel (Direct and Indirect), By SIL Type (SIL 1, SIL 2, SIL 3, and SIL 4), By End User (Oil & Gas, Food & Beverage, Power Generation, Automotive and Transportation, and Pharmaceutical), By Region (North America, Europe, Asia-Pacific, And Rest of the World) And Regional Forecast 2024-2034

Product link: <https://marketpublishers.com/r/F297F49C0560EN.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/F297F49C0560EN.html>