

# Teleprotection Market - By Product Type (Teleprotection units, Communication Network Technology, Software, Services), Components (IED, Interface Device, SCADA), Applications (Power, Telecom) and Geography - Analysis & Forecast (2013 - 2018)

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# **Abstracts**

Teleprotection market is at its early growth stage; however, it has a high potential across various industry verticals like power, telecom, oil & gas, transportation, information technology, aerospace & defense and so on. The increasing demand for energy saving and seamless transmission will boost the market with the help of advanced communication and network technologies. The market is in its growth stage and penetrating very fast. The market is estimated to reach \$9.31 billion in 2018 at a CAGR of 28.67% from 2013 to 2018.

This report based on an in-depth research study on the market and its related industries, focuses on the complete global market for all types of products which are available commercially and which are yet to commercialize in the near future (before 2018). The report presents a detailed insight on the current industry, and identifies key trends of various segments of the market with in-depth quantitative and qualitative information. The report segments the market on the basis of types of products, components, application, and geography. Further, it contains revenue forecasts, and trend analysis with respect to the market's timeliness.

Major players in this market include ABB Ltd. (Switzerland), Alcatel Lucent S.A. (France), Alstom S.A. (France), Cisco Systems (U.S.), DNV Kema (The Netherlands), GE Energy (U.S.), Nokia (Finland), Telco systems (U.S.), Siemens AG (Germany),



Schweitzer Engineering Laboratories, Inc. (U.S.) and so on.

Following is the detailed explanation of each segment:

#### Market by types of Products:

The product market can be divided into teleprotection unit, communication network technology, teleprotection software and services. The unit part can again be sub-divided into Directional electrical interface equipment, Optical interface equipment, Data terminal equipment (DTE), Data circuit terminating (communication) equipment (DCE), Multi-service access equipment and so on. The communication network technology can again be sub-segmented into conventional and advanced systems. The conventional methods consist of TDM (Time-division multiplexing); TDM over IP (time-division multiplexing over internet protocol) and PSN (Public switched network) while advanced methods consist of IP/MPLS (internet protocol/multi- protocol label switching) and SDH/SONET (synchronous digital hierarchy/synchronous optical network). The teleprotection software consists of synchrophasors software, event analysis software, network management system software and so on.

# **Market by Components:**

The component market can be divided into four major parts: Intelligent electronic device (IED), Interface device, Communication network components and Teleprotection SCADA. The IED market can again be sub-divided into Switches, Relays, Connecters, Multiplexers, Transducers, Routers, Controllers and so on. The interface devices Serial data interface, Parallel data interface, Analog data interface and Digital data interface. The Communication network consist of In-band, Out-band and Ethernet components. Inband consists of PLC (Power line communication), Out-band consists of OFC (Optical fiber communication), Copper wire communication and Pilot-relay communication while Ethernet consists of System configuration and protection signaling, Teleprotection using TDM over Ethernet converters and Ethernet Teleprotection using IEC-61850GOOSE messaging. The teleprotection SCADA market comprises of Architecture, Requirement and Function components.

#### **Market by Applications:**

The application market consists of different industry verticals such as Power, Telecom, Information technology (cyber security), Oil& Gas pipelines, Transportation, Aerospace & Defense and others. The power vertical can again be sub-segmented into phase



comparison and substation automation while telecom vertical can be sub-divided into Analog systems, Digital systems and Universal systems.

# Market by Geography:

The geography market can be divided into North America (the U.S, Canada and others), Europe (the U.K, Germany, Russia and others), the Asia Pacific (China, Japan, India and others) and Rest of the World (Latin America, The Middle East and others) with indepth analysis of their market share and key player distribution in the ecosystem.

The report also identifies the drivers, restraints, opportunities, current market trends, winning imperatives, and burning issues of the market. Apart from the market segmentation, the report also includes the critical market data and qualitative information for each product type along with qualitative analysis such as Porter's five force analysis, market timeline analysis, market investment analysis, industry breakdown analysis and value chain analysis.



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# **About**

A teleprotection system is an interface amid protection relay and telecommunication circuit or system that transforms the signal from the protection relay into a signal appropriate for transmission over a telecommunication link and multiplexes numerous signals into one telecom channel. The teleprotection market can be divided into four major parts: market by product type, market by components, market by applications and market by geography. The product market can again be divided into teleprotection unit, communication network technology, teleprotection software and teleprotection services. The teleprotection unit part can again be sub-divided into Directional electrical interface equipment, Optical interface equipment, Data terminal equipment (DTE), Data circuit terminating (communication) equipment (DCE), Multi-service access equipment and so on. The communication network technology can again be sub-segmented into conventional and advanced systems.

The conventional methods consist of TDM (Time-division multiplexing); TDM over IP (time-division multiplexing over internet protocol) and PSN (Public switched network) while advanced methods consist of IP/MPLS (internet protocol/multi- protocol label switching) and SDH/SONET (synchronous digital hierarchy/synchronous optical network). The teleprotection software consists of synchrophasors software, event analysis software, network management system software and so on.

The teleprotection component market can be divided into four major parts: Intelligent electronic device (IED), Interfaces device, Communication network components and Teleprotection SCADA. The IED market can again be sub-divided into Switches, Relays, Connecters, Multiplexers, Transducers, Routers, Controllers and so on. The interface devices Serial data interface, Parallel data interface, Analog data interface and Digital data interface. The Communication network consist of In-band, Out-band and Ethernet components. In-band consists of PLC (Power line communication), Out-band consists of OFC (Optical fibre communication), Copper wire communication and Pilotrelay communication while Ethernet consists of System configuration and protection signalling, Teleprotection using TDM over Ethernet converters and Ethernet Teleprotection using IEC-61850GOOSE messaging. The teleprotection SCADA market comprises of Architecture, Requirement and Function components.

The teleprotection application market consists of different industry verticals such as Power, Telecom, Information technology (cyber security), Oil & Gas pipelines, Transportation, Aerospace & Defence and others. The power vertical can again be sub-



segmented into phase comparison and substation automation while telecom vertical can be sub-divided into Analog systems, Digital systems and Universal systems. The teleprotection geography market can be divided into North America (U.S, Canada and others), Europe (U.K, Germany, Russia and others), Asia-Pacific (China, Japan, India and others) and Rest of the World (Latin America, The Middle East and others) with indepth analysis of their market share and key player distribution in the ecosystem.



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