

Substation Automation and Integration Market By Components - IEDS (RTU, PLC, Digital Protection Relay, Smart Meters), Communication Technology (Optical Fiber, PLC, Copper Wire, thernet), SCADA & Geography (2013 - 2018)

<https://marketpublishers.com/r/S565A66DE1DEN.html>

Date: October 2013

Pages: 272

Price: US\$ 5,650.00 (Single User License)

ID: S565A66DE1DEN

Abstracts

Substation automation has revolutionized the way utilities manage their networks. The substation automation seems to be growing consistently and its market is expected to cross \$100 billion mark in near future. Substation is a base for some of the most important functions of the utility, it is not wrong to say that any major breakthrough in substation technology is seen as one of the foremost aspects of the smart grid revolution. Presently, transmission and distribution utilities are targeting full substation automation of the retrofit substations or partially automated substations that already exist. The most prominent driver of this market is the aging energy infrastructure and increasing influence of a smart grid infrastructure that demands a multifunctional solution that comply with advanced communication protocols. The market is majorly driven by the Intelligent Electronic Devices (IEDs) that provide enormous barrier-less monitoring and control functions across the substation. Also, the communication networks that are used to control the substation devices and for transferring data, are having high growth rates pertaining to the emergence of new and advanced technologies and their significance in automation.

The growth of the substation automation market is expected to be remarkable with the revenue growth expected to reach \$122.94 billion by 2018, at an estimated CAGR of 5.2% from 2013 to 2018. The major players in the substation automation industry are ABB (Switzerland), Alstom (France), General Electric (U.S.), Schweitzer Engg Lab (U.S.); Siemens (Germany), Cooper power Systems (U.S.), NovaTech (U.S.) and so on.

The major drivers for substation automation market are grid efficiency and reliability which are the major contributing factors for utilities to go for automation; other drivers like cost saving, reduction in transmission and distribution loss have also been contributing to the market growth. Major restraints like regulation issues and high initial investments and their impact analysis are covered under this study.

The automation components have transformed the way substations were controlled and critical information was gathered. The global substation automation market is majorly governed by the automation components and IEDs such as digital protection relays, RTUs, logical programmable controller, digital transducers, recloser controls, capacitor bank controls, and voltage controls. The report covers the major communication technologies used for substation automation and which have the maximum potential to drive this market pertaining to the developments in advanced communication technologies. Substation automation is incomplete without communication as all the IEDs and monitoring devices which are located at substation and on the field actually generate data that has to be passed on to the utility data centre which is remotely located. This report also describes the wireless communication technologies such as RF Mesh and Zigbee which have the potential to enter this market in future.

This report describes the value chain for substation automation market by considering all the major stakeholders in the market and their role analysis. This report shows the life cycle analysis of communication technologies that are covered in the study. The report also provides detailed scrutiny of porter's five force analysis for the global substation automation market. All the five major factors in these markets have been quantified using internal key parameters governing each of them.

North America currently leads the market share for substation automation as this region has the most automated substations; it has reached up to the substantial maturity. APAC is the emerging market for substation automation and has the highest growth rate among all the geographic regions. It is believed that APAC market will grow at a CAGR of 9.1% from 2013 to 2018.

The report covers recent developments in the substation automation industry like Siemens (Germany), acquiring RuggedCom (Canada), in March 2013. Schneider Electric (France) acquired Electroshield – TM Samara (Russia) in March 2013. Several other recent developments and updated information about acquisitions, mergers, and new product launches and agreements conducted recently are discussed in the report.

This report deals with all the driving factors, restraints and opportunities with respect to

the substation automation market that are helpful in identifying trends and key success factors for the industry. It also profiles companies which are active in the field of substation automation. The report provides the competitive landscape of the players that covers key growth strategies followed by all the major players. It also highlights the winning imperatives and burning issues related to the substation automation industry.

Scope of the report

This research report categorizes the global substation automation market on the basis of components, communication networks & technology, substation types and SCADA for substation automation. It also covers the forecast revenue from 2013 to 2018 for the overall market as well as for all the segments covered in the report. It describes the deployments of substation automation in different regions with their market shares.

On the basis of IEDs

The global substation automation market is segmented on the basis of IEDs such as digital protection relays, RTUs, logical programmable controller, digital transducers, recloser controls, capacitor bank controls, and voltage controls.

On the basis of communication networks

The global substation automation market on the basis of communication networks that comprise copper wire communication, fibre optic communication, ethernet (copper or optic fibre) communication and Power line communication (PLC).

On the basis of types

The global substation automation market on the basis of substation types which consists of transmission substation, distribution substation and collector substation/tie line substation.

On the basis of SCADA

Global market for SCADA and its application in substation automation is covered in this report.

On the basis of geography

The global substation automation market on the basis of major geographic regions such as North America, Europe, Asia-Pacific, and ROW.

Contents

1 INTRODUCTION

- 1.1 KEY TAKE-AWAYS
- 1.2 REPORT DESCRIPTION
- 1.3 MARKETS COVERED
- 1.4 STAKEHOLDERS
- 1.5 RESEARCH METHODOLOGY
 - 1.5.1 MARKET SIZE
 - 1.5.2 KEY DATA POINTS TAKEN FROM SECONDARY SOURCES
 - 1.5.3 KEY DATA POINTS TAKEN FROM PRIMARY SOURCES
 - 1.5.4 ASSUMPTIONS MADE FOR THIS REPORT
 - 1.5.5 LIST OF COMPANIES COVERED DURING STUDY

2 EXECUTIVE SUMMARY

3 PREMIUM INSIGHTS

- 3.1 SUBSTATION AUTOMATION PRODUCTS, SERVICES AND COMMUNICATION COMPONENT MAPPING FOR THE PROFILED PLAYERS
- 3.2 GEOGRAPHY LIFE-CYCLE OF SUBSTATION AUTOMATION MARKET
- 3.3 GROWTH STRATEGY MATRIX (ANSOFF MATRIX)
 - 3.3.1 MARKET DEVELOPMENT
 - 3.3.2 DIVERSIFICATION
 - 3.3.2.1 Forward integration to be the smartest strategy for communication technology players
 - 3.3.3 MARKET PENETRATION
 - 3.3.4 PRODUCT DEVELOPMENT

4 MARKET OVERVIEW

- 4.1 MARKET DEFINITION
 - 4.1.1 ADVANTAGES OF SUBSTATION AUTOMATION
- 4.2 MARKET SEGMENTATION
- 4.3 VALUE CHAIN ANALYSIS
- 4.4 LIFE CYCLE ANALYSIS OF SUBSTATION AUTOMATION BY COMMUNICATION TECHNOLOGY
- 4.5 MARKET DYNAMICS

4.5.1 DRIVERS

- 4.5.1.1 Grid Efficiency & Reliability
- 4.5.1.2 Cost Saving
- 4.5.1.3 Deployment of Smart Grid
- 4.5.1.4 Enable Distributed Intelligence
- 4.5.1.5 Reduction in Transmission and Distribution Loss

4.5.2 RESTRAINTS

- 4.5.2.1 High Initial Investment
- 4.5.2.2 Lack of Common Standards & Interoperability
- 4.5.2.3 Regulation Issues
- 4.5.2.4 Technical Expertise

4.5.3 OPPORTUNITIES

- 4.5.3.1 Integration with Intelligent and Advanced Communication Technologies
- 4.5.3.2 Business and Home Energy Management

4.6 BURNING ISSUE

4.6.1 CYBER SECURITY

4.7 WINNING IMPERATIVE

4.7.1 PARTNERSHIPS WITH MAJOR PLAYERS

4.8 PEST ANALYSIS

4.9 PORTER'S FIVE FORCES

- 4.9.1 THREAT OF NEW ENTRANTS
- 4.9.2 THREAT OF SUBSTITUTES
- 4.9.3 BUYER'S BARGAINING POWER
- 4.9.4 SUPPLIER'S BARGAINING POWER
- 4.9.5 COMPETITIVE RIVALRY

4.10 LATEST TRENDS IN SUBSTATION AUTOMATION

4.10.1 IEC 61850 STANDARD INTEGRATION IN SUBSTATION AUTOMATION

- 4.10.1.1 IEC 61850 Implementation
- 4.10.1.2 IEC 61850 Security
 - 4.10.1.3 Mapping with other protocols
 - 4.10.1.3.1 MMS
 - 4.10.1.3.2 SNTP

4.10.2 BENEFITS OF IEC 61850

- 4.10.2.1 Lower integration costs
- 4.10.2.2 Lower installation cost
- 4.10.2.3 Lower Commissioning costs
- 4.10.2.4 Lower transducer costs
- 4.10.2.5 Lower extension costs

5 GLOBAL SUBSTATION AUTOMATION MARKET, BY COMPONENTS

5.1 INTRODUCTION

5.1.1 REVENUE HIERARCHY MODEL FOR IED

5.2 INTELLIGENT ELECTRONIC DEVICE (IED)

5.2.1 IED DATA TYPES

5.2.2 AUTOMATION SYSTEM & CONTROLLERS AND DIGITAL PROTECTION

RELAYS ARE CONSIDERED TO BE THE MAJOR IEDS

5.2.3 AUTOMATION SYSTEMS & CONTROLLERS

5.2.3.1 Remote Terminal Unit (RTU)

5.2.3.2 Programmable logic controller

5.2.3.3 Major Companies Into Programmable Logic Controller

5.2.3.4 General Specifications of PLC

5.2.3.5 Advantage of Programmable Logic Controller

5.2.4 SMART METER/DIGITAL TRANSDUCER

5.2.4.1 Major Companies Into Smart Meters

5.2.5 DIGITAL PROTECTION RELAYS

5.2.5.1 Major Companies Into Digital Protection Relay

5.2.6 VOLTAGE CONTROLS

5.2.6.1 Function of Voltage Controls

5.2.7 CAPACITOR BANK CONTROLS

5.2.7.1 Function of Capacitor Bank Controls

5.2.7.2 Specification of Capacitor Bank Controls

5.2.8 RECLOSER CONTROLS

5.2.8.1 Specification of Recloser Controls

5.2.9 TYPES OF APPLICATIONS

5.2.9.1 Over Current Protection

5.2.9.2 Equipment Monitoring

5.2.9.3 Relay Protection

5.2.9.4 Functions of Relay Protection

6 GLOBAL SUBSTATION AUTOMATIONS MARKET, BY COMMUNICATION NETWORK & TECHNOLOGY

6.1 INTRODUCTION

6.1.1 TYPES OF COMMUNICATION NETWORKS

6.2 COMMUNICATION PROTOCOL

6.2.1 COMMUNICATION PROTOCOL ANALYSIS

6.2.1.1 Within the Substation

6.2.1.2 From Substation to Substation

6.2.1.3 From substation to external host

6.3 BCG MATRIX OF SUBSTATION AUTOMATION BY COMMUNICATION TECHNOLOGY

6.3.1 POWER LINE COMMUNICATION TO HAVE HIGHEST GROWTH RATE

6.4 POWER LINE COMMUNICATIONS (PLC)

6.4.1 CLASSIFICATION OF POWER LINE COMMUNICATION

6.4.1.1 Broadband Over Power Lines

6.4.1.1.1 High Voltage

6.4.1.1.2 Medium Voltage

6.4.1.1.3 Low Voltage

6.4.1.2 Narrowband Over Power Lines

6.4.1.2.1 Frequency Range of Narrowband PLC System

6.5 OPTICAL FIBER COMMUNICATION

6.5.1 ADVANTAGES OF OPTICAL FIBER COMMUNICATION OVER OTHER TECHNOLOGIES

6.5.2 WAVELENGTH RANGE FOR OPTICAL FIBER COMMUNICATIONS

6.6 COPPER WIRE COMMUNICATION

6.6.1 COPPER WIRE COMMUNICATION CONTRIBUTES THE MAXIMUM SHARE

6.7 ETHERNET

6.7.1 ADVANTAGE OF ETHERNET COMMUNICATION

6.7.2 ETHERNET REQUIREMENT SPECIFICATIONS

6.8 OTHER COMMUNICATION TECHNOLOGY USED IN SMART GRID

6.8.1 ZIGBEE

6.8.2 Z-WAVE

6.8.3 RF MESH NETWORK

7 GLOBAL SUBSTATION AUTOMATIONS MARKET, BY TYPE

7.1 INTRODUCTION

7.2 TRANSMISSION SUBSTATION AUTOMATION

7.2.1 INTERNATIONAL STANDARDS FOLLOWED IN MODERN TRANSMISSION SUBSTATION

7.3 DISTRIBUTION SUBSTATION AUTOMATION

7.3.1 FUNCTIONS OF DISTRIBUTION SYSTEM

7.3.2 TYPES OF DISTRIBUTION SUBSTATION

7.3.2.1 Primary Distribution

7.3.2.2 Secondary Distribution

7.3.2.2.1 Standard Secondary Voltage Levels

7.4 COLLECTOR/TIE LINE SUBSTATION AUTOMATION

7.4.1 APAC REGION TO HAVE HIGHEST GROWTH RATE FOR COLLECTOR SUBSTATION AUTOMATION

8 GLOBAL SUBSTATION AUTOMATIONS MARKET, BY SCADA

8.1 INTRODUCTION

8.2 SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)

8.2.1 IMPORTANT FUNCTION OF SCADA SYSTEM

8.2.1.1 System Control

8.2.1.2 System Monitoring

8.2.1.3 Data Acquisition

9 GLOBAL SUBSTATION AUTOMATIONS MARKET, BY GEOGRAPHY

9.1 INTRODUCTION

9.1.1 NORTH AMERICA LEADS SUBSTATION AUTOMATION MARKET

9.1.2 BCG MATRIX OF SUBSTATION AUTOMATION BY GEOGRAPHY

9.2 NORTH AMERICA

9.2.1 DEVELOPMENT OF SUBSTATION AUTOMATION IN NORTH AMERICA

9.3 EUROPE

9.3.1 GERMANY IS THE LEADER IN ENERGY EFFICIENCY DEVELOPMENTS

9.4 APAC

9.4.1 SIGNIFICANT INVESTMENT PLAN OF CHINA TOWARDS SMART GRID CONSTRUCTION

9.4.2 SUBSTATION AUTOMATION PLAN IN INDIA

9.5 ROW

10 COMPETITIVE LANDSCAPE

10.1 MARKET SHARE RANKING

10.2 KEY GROWTH STRATEGIES

10.3 COMPANY PRODUCT PORFOLIO

10.4 NEW PRODUCT DEVELOPMENTS, EXPANSIONS AND CONTRACTS

10.5 COLLABORATIONS, EXPANSIONS, PARTNERSHIPS AND JOINT VENTURES

10.6 MERGERS AND ACQUISITIONS

11 COMPANY PROFILES(OVERVIEW, PRODUCTS AND SERVICES, FINANCIALS, STRATEGY & DEVELOPMENT)

- 11.1 ABB
- 11.2 ALSTOM SA
- 11.3 AMPERION
- 11.4 CISCO SYSTEMS
- 11.5 COOPER POWER SYSTEMS
- 11.6 EATON CORPORATION
- 11.7 ECHELON CORPORATION
- 11.8 ENCORE NETWORKS
- 11.9 GE ENERGY
- 11.10 GRID NET
- 11.11 INFRA X SYSTEMS
- 11.12 ITRON
- 11.13 LANDIS+GYR
- 11.14 NOVATECH
- 11.15 RUGGEDCOM
- 11.16 S&C ELECTRIC COMPANY
- 11.17 SIEMENS AG
- 11.18 SCHNEIDER ELECTRIC
- 11.19 SCHWEITZER ENGINEERING LABORATORIES
- 11.20 TRILLIANT
- 11.21 TROPOS NETWORKS (Details on Overview, Products and Services, Financials, Strategy & Development might not be captured in case of unlisted companies.)

List Of Tables

LIST OF TABLES

TABLE 1 REPORT ASSUMPTIONS

TABLE 2 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY MODULE, 2012 – 2018 (\$BILLION)

TABLE 3 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY COMPONENT, 2012 – 2018 (\$BILLION)

TABLE 4 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY COMMUNICATION TECHNOLOGY, 2012 – 2018 (\$BILLION)

TABLE 5 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY TYPE, 2012 – 2018 (\$BILLION)

TABLE 6 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY GEOGRAPHY, 2012 – 2018 (\$BILLION)

TABLE 7 PRODUCTS, SERVICES COMPONENT MAPPING OF MAJOR PLAYERS

TABLE 8 SUBSTATION AUTOMATION ADVANTAGES

TABLE 9 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY COMPONENTS, 2012 – 2018 (\$BILLION)

TABLE 10 TOP PLC COMPANIES

TABLE 11 PLC SPECIFICATIONS

TABLE 12 PLC ADVANTAGES

TABLE 13 AUTOMATION SYSTEMS & CONTROLLERS MARKET REVENUE, BY APPLICATION, 2012 - 2018 (\$BILLION)

TABLE 14 AUTOMATION SYSTEMS & CONTROLLERS MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 15 TOP SMART METER COMPANIES

TABLE 16 GLOBAL DIGITAL TRANSDUCER/SMART METER MARKET REVENUE, BY APPLICATION, 2012 - 2018 (\$BILLION)

TABLE 17 GLOBAL DIGITAL TRANSDUCER/SMART METER MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 18 TOP DIGITAL RELAY COMPANIES

TABLE 19 GLOBAL DIGITAL PROTECTION RELAY MARKET REVENUE, BY APPLICATION, 2012 - 2018 (\$BILLION)

TABLE 20 GLOBAL DIGITAL PROTECTION RELAY MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 21 TYPES OF CONTROLS

TABLE 22 GLOBAL VOLTAGE CONTROLS MARKET REVENUE, BY APPLICATION, 2012 - 2018 (\$BILLION)

TABLE 23 GLOBAL VOLTAGE CONTROLS MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 24 CAPACITOR BANK CONTROLS FUNCTIONS

TABLE 25 GLOBAL CAPACITOR BANK CONTROLS MARKET REVENUE, BY APPLICATION, 2012 - 2018 (\$BILLION)

TABLE 26 GLOBAL CAPACITOR BANK CONTROLS MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 27 CAPACITOR BANK CONTROLLER SPECIFICATIONS

TABLE 28 GLOBAL RECLOSER CONTROLS MARKET REVENUE, BY APPLICATION, 2012 - 2018 (\$BILLION)

TABLE 29 GLOBAL RECLOSER CONTROLS MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 30 RECLOSER CONTROLLER SPECIFICATIONS

TABLE 31 TYPES OF RELAY PROTECTION FUNCTIONS

TABLE 32 GLOBAL COMMUNICATION NETWORKS MARKET REVENUE, BY TECHNOLOGY, 2012 – 2018 (\$BILLION)

TABLE 33 NARROWBAND PLC SYSTEM FREQUENCY RANGES FOR DIFFERENT REGIONS

TABLE 34 GLOBAL POWER LINE COMMUNICATION MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 35 GLOBAL OPTICAL FIBER COMMUNICATION MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 36 FIBER OPTICS ADVANTAGES

TABLE 37 WAVELENGTH RANGE FOR OPTICAL FIBER COMMUNICATION

TABLE 38 GLOBAL COPPER WIRE COMMUNICATION MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 39 GLOBAL ETHERNET COMMUNICATION MARKET REVENUE, BY GEOGRAPHY, 2012 - 2018 (\$BILLION)

TABLE 40 REQUIREMENT SPECIFICATIONS

TABLE 41 ZIGBEE SPECIFICATIONS

TABLE 42 Z-WAVE SPECIFICATIONS

TABLE 43 GLOBAL SUBSTATION AUTOMATION MARKET REVENUE, BY TYPE, 2012 - 2018 (\$BILLION)

TABLE 44 GLOBAL TRANSMISSION SUBSTATION AUTOMATION MARKET REVENUE, BY GEOGRAPHY, 2012 – 2018 (\$BILLION)

TABLE 45 DISTRIBUTION SUBSTATION MAIN FUNCTIONS

TABLE 46 GLOBAL DISTRIBUTION SUBSTATION AUTOMATION MARKET REVENUE, BY GEOGRAPHY, 2012 – 2018 (\$BILLION)

TABLE 47 GLOBAL COLLECTOR SUBSTATION AUTOMATION MARKET REVENUE,

BY GEOGRAPHY, 2012 – 2018 (\$BILLION)

TABLE 48 TYPES OF SCADA ARCHITECTURES

TABLE 49 GLOBAL SCADA MARKET REVENUE, FOR SUBSTATION AUTOMATION, 2012 – 2018 (\$MILLION)

TABLE 50 GLOBAL SUBSTATION SCADA MARKET REVENUE, BY GEOGRAPHY, 2012 – 2018 (\$MILLION)

TABLE 51 NORTH AMERICA SUBSTATION AUTOMATION MARKET, BY MODULE, 2012 – 2018 (\$BILLION)

TABLE 52 NORTH AMERICA SUBSTATIONAUTOMATION MARKET, BY COMPONENTS, 2012 – 2018 (\$BILLION)

TABLE 53 NORTH AMERICA SUBSTATIONAUTOMATION MARKET, BY COMMUNICATION TECHNOLOGY, 2012 – 2018 (\$BILLION)

TABLE 54 NORTH AMERICA SUBSTATIONAUTOMATION MARKET, BY TYPE, 2012 – 2018 (\$BILLION)

TABLE 55 NORTH AMERICA SUBSTATIONAUTOMATION MARKET, BY SCADA, 2012 – 2018 (\$MILLION)

TABLE 56 EUROPE: SUBSTATIONAUTOMATION MARKET, BY MODULE, 2012 – 2018 (\$BILLION)

TABLE 57 EUROPE: SUBSTATIONAUTOMATION MARKET, BY COMPONENTS, 2012 – 2018 (\$BILLION)

TABLE 58 EUROPE: SUBSTATIONAUTOMATION MARKET, BY COMMUNICATION TECHNOLOGY, 2012 – 2018 (\$BILLION)

TABLE 59 EUROPE: SUBSTATIONAUTOMATION MARKET, BY TYPE, 2012 – 2018 (\$BILLION)

TABLE 60 EUROPE: SUBSTATIONAUTOMATION MARKET, BY APPLICATION, 2012 – 2018 (\$MILLION)

TABLE 61 INVESTMENT PLAN OF CHINESE GOVERNMENT, 2011 – 2015 (\$BILLION)

TABLE 62 APAC: SUBSTATIONAUTOMATION MARKET, BY MODULE, 2012 – 2018 (\$BILLION)

TABLE 63 APAC: SUBSTATIONAUTOMATION MARKET, BY COMPONENTS, 2012 – 2018 (\$BILLION)

TABLE 64 APAC: SUBSTATIONAUTOMATION MARKET, BY COMMUNICATION TECHNOLOGY, 2012 – 2018 (\$BILLION)

TABLE 65 APAC: SUBSTATIONAUTOMATION MARKET, BY TYPE, 2012 – 2018 (\$BILLION)

TABLE 66 APAC: SUBSTATIONAUTOMATION MARKET, BY APPLICATION, 2012 – 2018 (\$MILLION)

TABLE 67 ROW: SUBSTATIONAUTOMATION MARKET, BY MODULE, 2012 – 2018

(\$BILLION)

TABLE 68 ROW: SUBSTATIONAUTOMATION MARKET, BY COMPONENTS, 2012 – 2018 (\$BILLION)

TABLE 69 ROW: SUBSTATIONAUTOMATION MARKET, BY COMMUNICATION TECHNOLOGY, 2012 – 2018 (\$BILLION)

TABLE 70 ROW: SUBSTATIONAUTOMATION MARKET, BY TYPE, 2012 – 2018 (\$BILLION)

TABLE 71 ROW: SUBSTATIONAUTOMATION MARKET, BY APPLICATION, 2012 – 2018 (\$MILLION)

TABLE 72 SUBSTATION AUTOMATION MARKET SHARE

TABLE 73 NEW PRODUCT DEVELOPMENTS, EXPANSIONS & CONTRACTS, 2010 – 2013

TABLE 74 COLLABORATIONS, EXPANSIONS AND PARTNERSHIP, 2009 - 2013

TABLE 75 MERGERS & ACQUISITIONS, 2010 – 2013

TABLE 76 ABB: OVERALL REVENUE, 2010 – 2012 (\$BILLION)

TABLE 77 ABB: MARKET REVENUE, BY PRODUCT SEGMENTS, 2010 - 2011 (\$BILLION)

TABLE 78 OVERALL FINANCIALS OF ALSTOM SA, 2010 – 2012 (\$MILLION)

TABLE 79 ALSTOM MARKET REVENUE, BY GEOGRAPHY, 2010 – 2012 (\$MILLION)

TABLE 80 CISCO: OVERALL REVENUE, 2010 – 2012 (\$MILLION)

TABLE 81 EATON CORPORATION: OVERALL REVENUE, 2010 – 2012 (\$BILLION)

TABLE 82 EATON CORPORATION: MARKET REVENUE, BY PRODUCT SEGMENTS, 2010 - 2012 (\$BILLION)

TABLE 83 ECHELON: OVERALL REVENUE, 2010 – 2012 (\$MILLIONS)

TABLE 84 ECHELON: REVENUE, BY GEOGRAPHIC SEGMENTS, 2011 – 2012 (\$MILLION)

TABLE 85 GE ENERGY: OVERALL REVENUE, 2010 – 2012 (\$BILLION)

TABLE 86 GE ENEGY: REVENUE, BYGEOGRAPHY, 2010 – 2012 (\$BILLION)

TABLE 87 INFRAx SYSTEMS: OVERALL REVENUE, 2011 – 2012 (\$)

TABLE 88 ITRON: OVERALL REVENUE, 2010 – 2012 (\$MILLION)

TABLE 89 SIEMENS AG OVERALL REVENUE 2011-2012(\$MILLION)

TABLE 90 SIEMENS AG OVERALL REVENUE BY SEGMENTS, 2011 – 2012 (\$MILLION)

TABLE 91 SCHNEIDER ELECTRIC: OVERALL REVENUE, 2011 – 2012 (\$BILLION)

TABLE 92 SCHNEIDER ELECTRIC: REVENUE BY GEOGRAPHY, 2011 – 2012 (\$BILLION)

List Of Figures

LIST OF FIGURES

- FIGURE 1 STEPS IN RESEARCH METHODOLOGY
- FIGURE 2 GEOGRAPHY LIFE CYCLE OF SUBSTATION AUTOMATION
- FIGURE 3 GROWTH STRATEGY MATRIX FOR SUBSTATION AUTOMATION MARKET
- FIGURE 4 SUBSTATION AUTOMATION MARKET SEGMENTATION
- FIGURE 5 VALUE CHAIN OF SUBSTATION AUTOMATION INDUSTRY
- FIGURE 6 LIFE CYCLE OF SUBSTATION AUTOMATION BY COMMUNICATION TECHNOLOGY
- FIGURE 7 IMPACT ANALYSIS OF MARKET DRIVERS
- FIGURE 8 IMPACT ANALYSIS OF MARKET RESTRAINTS
- FIGURE 9 PORTER'S FIVE FORCES ANALYSIS FOR SUBSTATION AUTOMATION MARKET
- FIGURE 10 THREAT OF NEW ENTRANTS
- FIGURE 11 THREAT OF SUBSTITUTES
- FIGURE 12 BUYER'S BARGAINING POWER
- FIGURE 13 SUPPLIER'S BARGAINING POWER
- FIGURE 14 COMPETITIVE RIVALRY
- FIGURE 15 REVENUE HIERARCHY MODEL OF IEDS, 2013
- FIGURE 16 TYPES OF IED DATA
- FIGURE 17 CHOICE OF PROTOCOL WITHIN THE SUBSTATION
- FIGURE 18 CHOICE OF PROTOCOL FROM SUBSTATION TO SUBSTATION
- FIGURE 19 CHOICE OF PROTOCOL FROM SUBSTATION TO EXTERNAL HOST
- FIGURE 20 BCG MATRIX BY COMMUNICATION TECHNOLOGY
- FIGURE 21 TYPES OF DISTRIBUTION SUBSTATION
- FIGURE 22 GLOBAL SUBSTATION AUTOMATION MARKET SHARE, BY GEOGRAPHY, 2013 – 2018
- FIGURE 23 BCG MATRIX BY GEOGRAPHY
- FIGURE 24 KEY GROWTH STRATEGIES, 2009 – 2013
- FIGURE 25 PRODUCTS & SERVICES OFFERED BY SCHNEIDER ELECTRIC

I would like to order

Product name: Substation Automation and Integration Market By Components - IEDS (RTU, PLC, Digital Protection Relay, Smart Meters), Communication Technology (Optical Fiber, PLC, Copper Wire, thernet), SCADA & Geography (2013 - 2018)

Product link: <https://marketpublishers.com/r/S565A66DE1DEN.html>

Price: US\$ 5,650.00 (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/S565A66DE1DEN.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