Power Line Communication (PLC) Systems - Global Strategic Business Report

Description:
This report analyzes the worldwide markets for Power Line Communication (PLC) Systems in US$ Million and Thousand Units by the following Types: Narrowband PLC, and Broadband PLC. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America.

Annual estimates and forecasts are provided for the period 2013 through 2020. Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs.

The report profiles 47 companies including many key and niche players such as:

- ABB Ltd.
- Aclara Technologies LLC
- Alcatel-Lucent S.A
- Amperion, Inc.
- Ariane Controls, Inc.

Contents:

I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS
- Study Reliability and Reporting Limitations
- Disclaimers
- Data Interpretation & Reporting Level
- Quantitative Techniques & Analytics
- Product Definition and Scope of Study

II. EXECUTIVE SUMMARY

1. INDUSTRY OVERVIEW
- PLC Systems: Enabling Secure & Robust Data Communication over Electric Power Lines
- Growth Drivers in a Nutshell
- PLCC Technology: Vital for Ensuring Reliability of Power Generation, Transmission and Distribution Networks
- Despite Myriad Benefits, Few Concerns Continue to Hamper Widespread Adoption
- Global Market Outlook
- Developed Countries Dominate, while Emerging Economies Continue to Offer Significant Growth Opportunities

2. MARKET TRENDS, ISSUES & DRIVERS
- Surging Demand from Electric Utilities Worldwide: A Strong Growth Driver
- Rising Investments in Smart Grids Underpins Market Growth
- Smart Grid Landscape: List of Components & Systems for Power T&D Infrastructure, Communication Network, and Computing Platform

Table 1: Global Power Line Communications (PLC) Systems Market (2015E): Market Shares of Developed Regions/Countries (includes corresponding Graph/Chart)
Table 2: Growth of Developing Countries Vis-à-Vis the Developed Countries over the Period 2013-2020: China, Brazil, Russia, Japan, France, Canada, Spain, the US, the UK, Germany, and Italy (includes corresponding Graph/Chart)
Table 3: Leading Smart Meter Companies Worldwide (2014): Percentage Market Share Breakdown for Elster, GE, Itron, Landis+Gyr, Sensus, and Others (includes corresponding Graph/Chart)

Table 4: Estimated Global Demand for Primary Energy (in Mtoe) and Electricity (MWh): 2015, 2020, 2025, 2030, and 2035 (includes corresponding Graph/Chart)
Table 5: World Electric Power Generation: Growth Trajectory for the Period 2004 & 2015 (in Billion KWh) (includes corresponding Graph/Chart)
Table 6: Global Smart Grid Capital Expenditure (CAPEX) by Application (2013-2020): Percentage Share
Breakdown of Capex for AMI/Smart Meters, Communications Infrastructure, Distribution Automation, Information Technology Systems, Substation Automation, and Others (includes corresponding Graph/Chart)

Table 7: Global Spend on Smart Grid Technologies by Region (2014, 2017 & 2020): Cumulative Spending (in US$ Billion) for Asia-Pacific (incl. China), Europe, Latin America, and North America (includes corresponding Graph/Chart)

Table 8: Global Smart Grid Investments by Country (2014): Percentage Share Breakdown of Investments for China, US, and Others (includes corresponding Graph/Chart)

Robust Demand for Advanced Metering Infrastructure (AMI) Augurs Well for Market Expansion

Table 9: Global Advanced Metering Infrastructure (AMI) Market (Annual Revenues in US$ Million): 2014E & 2018P (includes corresponding Graph/Chart)

PLC Technology Competes with RF and WMT in the Booming Smart Electricity Meters Market

Table 10: Global Electricity Meters Market (in Million Units): 2013, 2015E & 2017P (includes corresponding Graph/Chart)

Table 11: Global Smart Electricity Meters Market by Geographic Region (2014 & 2018): Percentage Breakdown of Demand for Asia, EMEA, Latin America, and North America (includes corresponding Graph/Chart)

Non-Technical Energy Loss during Distribution Drives Demand for PLC-Based AMR

Table 12: Global Electricity Transmission & Distribution Losses as a Percentage of Output for 49 Countries: 2013 (includes corresponding Graph/Chart)

Table 13: Global Electricity Use and Network Loss (in TWh) for Europe, Former Soviet Union, North America, Latin America, Asia, and Middle East & Africa: 2011 (includes corresponding Graph/Chart)

Rising Prominence of Internet of Things (IoT) in Utilities to Benefit Penetration

PLC: The Preferred Communication Technology for Integration of Electric Vehicles with the Smart Grid

Upcoming Smart Cities to Fuel Large-Scale Adoption in the Long Term

PLC Paves the Way for Automated Outdoor Lighting

PLC Technology Enable Effective Control and Monitoring of Connected Homes

Table 14: World 5-Year Perspective for Connected Living Room by Geographic Region (2015E and 2020P): Percentage Breakdown of Dollar Revenues for US, Europe, Asia-Pacific (including Japan), and Rest of World Markets (includes corresponding Graph/Chart)

PLC Solutions Enable Hassle-Free and Cost Effective Home Area Networking

Increasing Focus on Applications of PLC over DC Lines Bodes Well for the Market

Power Line Communications: An Emerging Tool for Delivering Tele-Healthcare

PLC Based Power Systems Aid in Reducing Downtime in Datacenters

PLC Holds the Key to Bridging Digital Divide between Urban and Rural Areas

Broadband over Power Line Fails to Gain Traction in Consumer Broadband Access

3. PRODUCT OVERVIEW

Power Line Communication (PLC): Introduction

Evolution of PLC Technology

Classification of PLC Systems Based on Operating Frequency

PLC Systems Classification by Operating Frequency

Narrowband PLC Systems

Narrowband PLC Frequency Bands for Select Regions

Major Standards for Narrowband PLC Systems

Narrow Band PLC Specifications at a Glance

Ultra-Narrowband PLC Systems

Broadband PLC Systems

Overview of IEEE 1901 and ITU-T.G.hn PLC Standards

Broadband PLC Specifications at a Glance

Basic PLC Network Components

Primary Modulation Techniques for PLC Systems

Select PLC Modulation Schemes with Characteristics

Single-Carrier Modulation

Multi-Carrier Modulation

Spread-Spectrum Modulation

PLC Applications in Power Lines with Low, Medium and High Operational Voltage

PLC Over Low-Voltage (LV) Lines

PLC Over Medium-Voltage (MV) Lines

PLC Over High-Voltage (HV) Lines

4. PRODUCT INNOVATIONS/INTRODUCTIONS

Tantalus Rolls Out AMR-to-AMI Overlay Capability

D-Link Introduces Gigabit PowerLine Home Networking Systems with MIMO
China Telecom, Skyworth Unveil First-ever Smart TV with Power Line Connectivity
Semitech Semiconductor Unveils SM2480 Signal Controller
Nexans Demonstrates 3rd Generation PLC Solution
Renesas Electronics Europe Unveils Renesas OFDM PLC Modem
Adaptive Networks Rolls out MWB Powerline Modem
devolo Introduces dLAN 1200 Gigabit Powerline Wi-Fi AC Adapter
Greenivy Communications Demonstrates Smart Meter Range Extender
Atmel Releases Two G3- PLC Solutions
Texas Instruments Rolls Out TMDSPLCKITV4 Kits
Atmel Introduces G3-PLC-compliant SAM4CP16C SoC and ATPL250A Modem
Texas Instrument Introduces PLC Platform Complaint with G3, PRIME and IEEE-1901.2 Standards
Atmel Corporation Releases Atmel ATPL230A PLC Modem
Paradox Engineering Rolls Out PE.AMI PLC Node
Ariane Controls Launches PLM-HDR PLC Platform
Texas Instruments, Tailyn Technologies Jointly Unveil Customizable Field-tested PLC Module
ZTE Introduces ZXHN H51 Series PLC Adapters
STMicroelectronics Unveils ST75MM IC
Accent Launches ASMgrid2 ASM220
AcBel Polytech Unveils PLC Products with Marvell G.hn Chipset
Lumenpulse Rolls Out Lumentalk Display
ZyXEL Communications Unveils PLA4231 Powerline Adapter and Wireless Extender
devolo Introduces dLAN 500 AV Wireless+ Adapter
Broadcom Rolls Out HomePlug AV2 devices for PLC-Wi-Fi Extenders and PLC Adapters
Elster Demonstrates G3PLC Solution
AnSem Releases ANS6201 Single Chip AFE for PLC Systems

5. RECENT INDUSTRY ACTIVITY
Lumenpulse Takes Over Ariane Controls
Semtech Completes Purchase of Assets of EnVerv
Smart Wire Secures Funding for Commercializing PowerLine Guardian Device
Theoebroma Systems Chooses Selects Semitech SM2400 N-PLC Modem
Allalouf Capital Takes Over and Rebrands Yitran Communications as Yitran Technologies
devolo AG Starts Spanish Subsidiary devolo Spain S.L
gridComm to Partner EDMI for Developing New PLC Based Smart Meters
Texas Instruments Secures G3-PLC Alliance Approval for PLC Reference Designs
Aclara Technologies PLC Systems Selected by Six Utilities
Landis+Gyr Secures 13 Utilities Contracts for Gridstream PLX PLC Solution for Advanced Metering
Vattenfall Tests Power Plus Communications Broadband Powerline System
Panasonic System Networks Secures NIST2 SGIP3 Approval for HD-PLC1 BPL Technology
Billion Electric Selects Marvell’s Transceiver Chipset for G. hni Product Series

6. FOCUS ON SELECT PLAYERS
ABB Ltd. (Switzerland)
Aclara Technologies LLC (USA)
Alcatel-Lucent S.A (France)
Amperion, Inc. (USA)
Ariane Controls, Inc. (Canada)
Atmel Corp. (USA)
Billion Electric Co. Ltd (Taiwan)
Broadcom Corp. (USA)
Cypress Semiconductor Corp. (USA)
D-link System, Inc. (Taiwan)
Echelon Corp. (USA)
Elster Group GmbH (Germany)
Landis+Gyr AG (Switzerland)
Marvell Technology Group Ltd (Bermuda)
Maxim Integrated Products, Inc. (USA)
Microchip Technology, Inc. (USA)
NXP Semiconductor NV (Netherlands)
Power Plus Communications AG (Germany)
PLC International (USA)
Qualcomm Atheros, Inc. (USA)
Semitech Semiconductor Pte Ltd. (Australia)
Sigma Designs, Inc. (USA)
STMicroelectronics N.V (Switzerland)
ST&T Corp. (Taiwan)
Texas Instruments Inc. (USA)
TP-LINK Technologies Co., Ltd. (China)
Yitran Communications Ltd. (Israel)

7. GLOBAL MARKET PERSPECTIVE

Value Analytics
Table 15: World Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 16: World 8-Year Perspective for Power Line Communication (PLC) Systems by Geographic Region - Percentage Share Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Table 17: World Recent Past, Current & Future Analysis for Narrowband PLC Systems by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 18: World 8-Year Perspective for Narrowband PLC Systems by Geographic Region - Percentage Share Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Table 19: World Recent Past, Current & Future Analysis for Broadband PLC Systems by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 20: World 8-Year Perspective for Broadband PLC Systems by Geographic Region - Percentage Share Breakdown of Dollar Revenues for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Volume Analytics
Table 21: World Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 22: World 8-Year Perspective for Power Line Communication (PLC) Systems by Geographic Region - Percentage Share Breakdown of Unit Shipments for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Table 23: World Recent Past, Current & Future Analysis for Narrowband PLC Systems by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 24: World 8-Year Perspective for Narrowband PLC Systems by Geographic Region - Percentage Share Breakdown of Unit Shipments for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Table 25: World Recent Past, Current & Future Analysis for Broadband PLC Systems by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 26: World 8-Year Perspective for Broadband PLC Systems by Geographic Region - Percentage Share Breakdown of Unit Shipments for US, Canada, Japan, Europe, Asia-Pacific, Middle East & Africa, and Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

III. MARKET

1. THE UNITED STATES
A. Market Analysis
Current and Future Analysis
Product Introductions
Strategic Corporate Developments
Select Key Players
B. Market Analytics

Value Analytics
Table 27: US Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type
Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 28: US 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Volume Analytics
Table 29: US Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type
Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 30: US 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

2. CANADA

A. Market Analysis
Current and Future Analysis
Product Introductions
Strategic Corporate Development
Ariane Controls, Inc. - A Key Canadian Player

B. Market Analytics
Value Analytics
Table 31: Canadian Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 32: Canadian 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Volume Analytics
Table 33: Canadian Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 34: Canadian 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

3. JAPAN

A. Market Analysis
Current and Future Analysis
Strategic Corporate Development

B. Market Analytics
Value Analytics
Table 35: Japanese Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type
Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 36: Japanese 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Volume Analytics
Table 37: Japanese Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type
Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 38: Japanese 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

4. EUROPE
A. Market Analysis
Current and Future Analysis
EU Directive Benefit Roll Out of PLC-based Smart Meters

B. Market Analytics
Value Analytics

Table 39: European Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Geographic Region - France, Germany, Italy, UK, Spain, Russia, and Rest of Europe Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 40: European 8-Year Perspective for Power Line Communication (PLC) Systems by Geographic Region Percentage Share Breakdown of Dollar Revenues for France, Germany, Italy, UK, Spain, Russia, and Rest of Europe Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Table 41: European Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 42: European 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Volume Analytics

Table 43: European Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 44: European 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

4a. FRANCE
A. Market Analysis
Current and Future Analysis
Product Introductions
Alcatel-Lucent S.A - A Key French Player

B. Market Analytics
Table 45: French Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

4b. GERMANY
A. Market Analysis
Current and Future Analysis
Product Introductions
Strategic Corporate Development
Select Key Players

B. Market Analytics
Table 46: German Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

4c. ITALY
A. Market Analysis
Current and Future Analysis
Product Introduction

B. Market Analytics
Table 47: Italian Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

4d. THE UNITED KINGDOM
A. Market Analysis
Current and Future Analysis

B. Market Analytics
Table 48: UK Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

4e. SPAIN
A. Market Analysis
Current and Future Analysis
Strategic Corporate Development
B. Market Analytics
Table 49: Spanish Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems
Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

4f. RUSSIA
A. Market Analysis
Current and Future Analysis
B. Market Analytics
Table 50: Russian Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems
Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

4g. REST OF EUROPE
A. Market Analysis
Current and Future Analysis
Product Introductions
Strategic Corporate Developments
Select Key Players
B. Market Analytics
Table 51: Rest of Europe Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

5. ASIA-PACIFIC
A. Market Analysis
Current and Future Analysis
B. Market Analytics
Value Analytics
Table 52: Asia-Pacific Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Geographic Region - China, and Rest of Asia-Pacific Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 53: Asia-Pacific 8-Year Perspective for Power Line Communication (PLC) Systems by Geographic Region Percentage Share Breakdown of Dollar Revenues for China, and Rest of Asia-Pacific Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Table 54: Asia-Pacific Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 55: Asia-Pacific 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Volume Analytics
Table 56: Asia-Pacific Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 57: Asia-Pacific 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

5a. CHINA
A. Market Analysis
Current and Future Analysis
Buoyant Smart Grid and Smart Homes Market Drives Demand for PLC Chips
Product Introductions
TP-Link Technologies Co., Ltd. - A Key Chinese Player
B. Market Analytics
Value Analytics
Table 58: Chinese Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

5b. REST OF ASIA-PACIFIC
A. Market Analysis
Current and Future Analysis
Product Introductions
Strategic Corporate Developments
Select Key Players
B. Market Analytics
Value Analytics

Table 59: Rest of Asia-Pacific Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

6. MIDDLE EAST & AFRICA
A. Market Analysis
Current and Future Analysis
Strategic Corporate Development
Yitran Communications Ltd - A Key Israeli Player
B. Market Analytics
Value Analytics

Table 60: Middle East & Africa Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 61: Middle East & Africa 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type
Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Volume Analytics
Table 62: Middle East & Africa Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 63: Middle East & Africa 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type
Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

7. LATIN AMERICA
A. Market Analysis
Current and Future Analysis
B. Market Analytics
Value Analytics

Table 64: Latin American Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Geographic Region - Brazil, and Rest of Latin America Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 65: Latin American 8-Year Perspective for Power Line Communication (PLC) Systems by Geographic Region
Percentage Share Breakdown of Dollar Revenues for Brazil, and Rest of Latin America Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Table 66: Latin American Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 67: Latin American 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Dollar Revenues for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
Volume Analytics
Table 68: Latin American Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems by Product Type - Narrowband PLC and Broadband PLC Systems Markets Independently Analyzed with Annual Shipments in Thousand Units for Years 2013 through 2020 (includes corresponding Graph/Chart)
Table 69: Latin American 8-Year Perspective for Power Line Communication (PLC) Systems by Product Type - Percentage Share Breakdown of Unit Shipments for Narrowband PLC and Broadband PLC Systems Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)
7a. BRAZIL
A. Market Analysis
Current and Future Analysis
B. Market Analytics

Table 70: Brazilian Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems
Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

7b. REST OF LATIN AMERICA
A. Market Analysis
   Current and Future Analysis
B. Market Analytics

Table 71: Rest of Latin America Recent Past, Current & Future Analysis for Power Line Communication (PLC) Systems Markets Analyzed with Annual Revenue Figures in US$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

IV. COMPETITIVE LANDSCAPE

Total Companies Profiled: 47 (including Divisions/Subsidiaries - 48)

The United States (16)
Canada (2)
Japan (2)
Europe (15)
- France (2)
- Germany (6)
- The United Kingdom (1)
- Italy (1)
- Spain (1)
- Rest of Europe (4)
Asia-Pacific (Excluding Japan) (10)
Middle East (3)

Ordering:

Order Online - http://www.researchandmarkets.com/reports/3397965/

Order by Fax - using the form below

Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Power Line Communication (PLC) Systems - Global Strategic Business Report  
Web Address: http://www.researchandmarkets.com/reports/3397965/  
Office Code: SCBRU7P4

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Product Format</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) -</td>
<td>USD 4500</td>
</tr>
<tr>
<td>Single User:</td>
<td></td>
</tr>
<tr>
<td>Electronic (PDF) -</td>
<td>USD 6300</td>
</tr>
<tr>
<td>1 - 5 Users:</td>
<td></td>
</tr>
<tr>
<td>Electronic (PDF) -</td>
<td>USD 8550</td>
</tr>
<tr>
<td>1 - 10 Users:</td>
<td></td>
</tr>
<tr>
<td>Electronic (PDF) -</td>
<td>USD 10800</td>
</tr>
<tr>
<td>1 - 15 Users:</td>
<td></td>
</tr>
</tbody>
</table>

Contact Information
Please enter all the information below in BLOCK CAPITALS

<table>
<thead>
<tr>
<th>Title:</th>
<th>Mr</th>
<th>Mrs</th>
<th>Dr</th>
<th>Miss</th>
<th>Ms</th>
<th>Prof</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name:</td>
<td></td>
<td></td>
<td></td>
<td>Last Name:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email Address:</th>
<th>*</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Job Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>Postal / Zip Code:</td>
</tr>
<tr>
<td>Country:</td>
</tr>
<tr>
<td>Phone Number:</td>
</tr>
<tr>
<td>Fax Number:</td>
</tr>
</tbody>
</table>

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:

Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

<table>
<thead>
<tr>
<th>Account number</th>
<th>833 130 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB98533083313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: 

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:

(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World