PowerLogic™

Electrical network management

Energy management, revenue metering and power quality monitoring

www.schneider-electric.com
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to PowerLogic</td>
<td>3</td>
</tr>
<tr>
<td>Product panorama</td>
<td>7</td>
</tr>
<tr>
<td>Current transformers</td>
<td>15</td>
</tr>
<tr>
<td>Panel instruments</td>
<td>32</td>
</tr>
<tr>
<td>Basic energy metering</td>
<td>43</td>
</tr>
<tr>
<td>IEM2000 series and IEM3000 series</td>
<td></td>
</tr>
<tr>
<td>Basic multi-function metering</td>
<td>58</td>
</tr>
<tr>
<td>ION6200, PM3000 series, PM5350 and PM5000 series</td>
<td></td>
</tr>
<tr>
<td>Advanced metering</td>
<td>104</td>
</tr>
<tr>
<td>PM8000 series and ION9000 series</td>
<td></td>
</tr>
<tr>
<td>Advanced utility metering</td>
<td>127</td>
</tr>
<tr>
<td>ION7400, ION8650 and ION8800</td>
<td></td>
</tr>
<tr>
<td>Multi-circuit metering</td>
<td>157</td>
</tr>
<tr>
<td>BCPM, EM4000 series, EM4800, and EM4900</td>
<td></td>
</tr>
<tr>
<td>Retrofit &amp; wireless products</td>
<td>195</td>
</tr>
<tr>
<td>EM3500, EM4200, EM4300, WT4100/4200</td>
<td></td>
</tr>
<tr>
<td>Communications and gateways</td>
<td>221</td>
</tr>
<tr>
<td>Link150, Com’X 210, Com’X 510 and ION7550 RTU</td>
<td></td>
</tr>
<tr>
<td>Insulation monitoring devices</td>
<td>248</td>
</tr>
<tr>
<td>Vigilohm insulation monitoring devices</td>
<td></td>
</tr>
<tr>
<td>Energy &amp; power management edge control platforms</td>
<td>253</td>
</tr>
<tr>
<td>EcoStruxure™ Power Management software</td>
<td></td>
</tr>
<tr>
<td>EcoStruxure™ Power Monitoring Expert, EcoStruxure™ Power SCADA Operation</td>
<td></td>
</tr>
<tr>
<td>Commercial reference numbers</td>
<td>265</td>
</tr>
</tbody>
</table>

Clicking on a Commercial Reference Number or scanning the product’s QR Code links you to further product information on [www.schneider-electric.com](http://www.schneider-electric.com)
PowerLogic™ System is…

Schneider Electric believes every business can increase productivity while consuming less and achieving energy savings of 10% to 30%.

Saving energy reduces costs and pollution, but you need the tools to uncover all opportunities, avoid risks, track progress against goals, and verify success. Schneider Electric provides these tools via the world’s most advanced energy intelligence technology: PowerLogic.

A PowerLogic system of meters, software and power quality solutions help manage all energy assets, every second of the day. A PowerLogic system enables all stakeholders, from CEO to facility and engineering managers, to respond quickly to potential problems and manage energy in financial and environmental terms.

PowerLogic technology delivers the key performance indicators and analytics that you need to strategically balance emissions, efficiency, reliability and cost.
Gain energy insight and control with PowerLogic™ systems

Cutting-edge technology to increase profitability

PowerLogic technology converts the complex dynamics governing the relationship between power generation and distribution on the utility side, and energy consumption, cost and reliability on the consumer side, into timely, easily understood information. Businesses can use this powerful to improve tactical actions and strategic decision making.

From a single facility to an entire enterprise, PowerLogic meters monitor key distribution points 24 hours a day. Whether from generators, substations, service entrances, mains, feeders, loads or 3rd party equipment and systems, PowerLogic technology tracks, records and reports all real-time conditions and historical performance data. Intuitive web-based interfaces give stakeholders access to this data as well as advanced analytics, alarm annunciation and control capabilities. It supports comprehensive energy management programs by tracking performance and empowering you to make effective decisions.

Demand

Power availability and reliability
- Validate that power quality complies with the energy contract
- Identify power quality issues and fix them quickly with reliable mitigation solutions
- Improve response to power-related problems
- Leverage existing infrastructure capacity and avoid over-building
- Support proactive maintenance to prolong asset life

Energy efficiency and cost savings
- Measure efficiency, reveal opportunities and verify savings
- Manage greenhouse gas emissions
- Allocate energy costs to departments or processes
- Reduce peak demand and power factor penalties
- Enable participation in loadcurtailment programs (e.g. demand response)
- Strengthen rate negotiation with energy suppliers
- Identify billing discrepancies
- Sub-bill tenants for energy costs

Supply

Energy availability and reliability
- Improve T&D network reliability
- Enhance substation automation
- Maximize the use of your existing infrastructure

Revenue metering and power quality
- Maximize metering accuracy at all interchange points
- Verify compliance with new power quality standards
- Analyse and isolate the source of power quality problems
Market segments

Industry
From finance to engineering, PowerLogic technology gives industry professionals the energy intelligence and control they need to support strategic decisions and establish best energy practices. It will help you reduce operational costs and meet new emissions standards without compromising production schedules or product quality.

Key points are monitored throughout your power distribution, building and backup systems. Enterprise-level software helps you maximize the use of your existing energy assets, increase energy efficiency and avoid demand or power factor penalties. Use it to uncover and solve hidden power problems that can shorten equipment life or cause costly downtime.

- Cost allocation
- Procurement optimization
- Power factor correction
- Continuity of service even in case of an earth fault

Buildings
Building managers through operations staff can cut energy and maintenance costs without effecting the comfort or productivity of their tenants, employees, students, patients or customers. A PowerLogic system will track all utilities and equipment conditions, and enterprise-level software will help you analyse and improve electrical reliability.

You can forecast energy requirements, optimize multi-site contracts and accurately allocate or sub-bill costs. Key performance indicators help you find and sustain energy savings, reduce emissions and meet “green” building standards in order to increase asset value and attract or retain tenants.

- Tenant sub-billing
- Cost allocation
- Energy efficiency & benchmarking
- Procurement optimization
- Power availability
- Demand response / load curtailment
Critical infrastructure

PowerLogic technology helps keep your systems operating continuously and securely with an economical supply of energy. Whether you manage data, communication, transportation or environmental services, minimising the risk of power-related downtime and keeping costs under control is a priority.

A PowerLogic system monitors all power and cooling systems, accurately tracks their energy consumption, and allows you to identify and fix power quality issues as soon as they arise. Enterprise-level software delivers insightful diagnostics and metrics to help verify the reliability of your backup systems and maximize the use of existing capacity to defer new capital investments. You can also reveal energy inefficiencies and strengthen energy procurement across multiple sites.

- Revenue metering
- Power quality monitoring
- Power availability and reliability
- Insulation monitoring

Utilities

Today's energy market is more complex than ever before. Whether you generate, transmit or distribute electricity, more stakeholders need shared access to timely, accurate energy data from more exchange points and you need to maintain power availability and reduce price volatility in the face of rising demand and transmission congestion. A PowerLogic energy information system helps you meet all of these challenges by:

- Metering all key interchange points with the highest possible accuracy
- Improving the quality of power delivered to your customers
- Ensuring the reliability and efficiency of your network and equipment

From advanced energy and power quality metering systems to enterprise-level analytic software and power quality mitigation solutions, PowerLogic systems deliver business-critical information that conventional metering, SCADA and billing systems cannot. It gives you the energy intelligence and control needed to track performance, stay informed of critical conditions and empower you to make strategic decisions. It will help you increase reliability, maximize the use of resources and improve service.

- Infrastructure optimization
- Power quality analysis compliance
- Alarming and event notification
- Energy efficiency
- Cost allocation
- Procurement optimization