Optimize your power network with data-driven decisions

StruxureWare Power Monitoring Expert software delivers the integrated information for maximizing network reliability and performance.
The need to clearly understand your entire facility’s power performance + Flexible, scalable, and intuitive Power Monitoring Expert software = Timely access to actionable data for maximizing network reliability and performance
Today, facility managers are pushed to the limit with demands on their time, staff reductions, increasing responsibilities, complexity of systems, and capex and opex pressures. At the same time, critical business operations depend on your ability to maintain reliable operations, reduce energy costs, and get the most out of your electrical assets.

StruxureWare Power Monitoring Expert brings your facility together

StruxureWare™ Power Monitoring Expert is a complete, interoperable, and scalable supervisory software dedicated to power monitoring that enables you to maximize operational efficiency, optimize your power distribution system, and improve your bottom-line performance.

Real-time monitoring, alarming, and power quality analysis helps you avoid critical conditions that can cause equipment failures and downtime. Track consumption and the cost of power, gas, and other resources, and allocate costs by building, department, or process. The software helps you uncover energy waste, unused system capacity, and shows new ways to extend equipment performance and life span. Plus, cutting-edge flexibility let you extend your power management system at your own pace, and allows for an open system with the integration of third-party devices and systems. Save thousands of engineering hours with ready-to-use device drivers, preconfigured tables, views, and reports dedicated to power and energy management.

Enhanced data visibility for improved performance across your facility

30% Monitoring and control systems can save you up to 30% of your annual energy consumption
Easy-to-implement energy efficiency measures with quick results

Power management at your fingertips

Power availability and reliability
- Verify the reliable operation of power equipment
  - Ensure and indicate that operations are normal
  - Proactively optimise electrical distribution network
  - Monitor breaker status, trip counting, real-time voltage, transformers, ATS, generators, capacitor banks, and tap changers
  - Stay alert to adverse trends; take corrective action when necessary
- Improve response to power-related problems
  - Verify normal activities and provide information to help proactively assess issues
  - Quickly review events, trends, and load status before, during, and after a problem
- Validate that power quality complies with the energy contract
  - Analyze and verify metrics to ensure compliance with agreed-upon levels of quality

Billing and cost allocation
- Produce accurate tenant energy bills
  - Automatically collect meter energy consumption data (AMR)
  - Calculate the cost for energy (WAGES) usage based on tiered rates, coincidence demand, Time of Use (TOU), Power Factor penalties, taxes, and other charges
  - Totalize metering points for accurate energy usage allocation
  - Account for changing tenants at any time
- Identify billing discrepancies
  - Validate utility bills, document errors, and measure energy contract compliance
  - Identify false penalty charges and validate benefits of on-site generation
- Allocate costs to departments or processes
  - Collect, calculate, and report costs for buildings, departments, processes, shifts, lines, or equipment
  - Reduce expenses, enable best practices, and validate all your conservation initiatives
Energy efficiency

Measure efficiency, reveal opportunities and verify savings
> Measure and compare consumption across departments, processes, and industry KPIs to identify the optimal places for improvement or adjustment
> Confirm ROI for system improvements with advanced reporting and analysis

Reduce peak demand, power factor penalties
> Identify locations of poor power factor and justify power factor improvement measures
> Automatically monitor capacitor banks, load tap changers
> Alert on demand levels, analyze trends to identify demand reduction and load shifting opportunities

Participate in load curtailment programs
> Review historical patterns to build a curtailment plan to enable participation in utility programmes
> Automate, aggregate load management to verify curtailment, coordinate backup systems, and ensure contract compliance
> Negotiate to reduce loads in response utility curtailment requests

Electrical distribution monitoring

Leverage existing infrastructure capacity and avoid over-building
> Reveal historical and current load patterns and hidden capacity
> Determine if existing infrastructure will accommodate new equipment

Support proactive maintenance to prolong asset life
> Real-time and historical data reveals relationships between equipment and the conditions affecting system stability
Your power monitoring system needs to be an integral part of your business strategy. Power Monitoring Expert software fits in with your objectives and expands its capabilities with flexible deployment options that meet the needs of your IT group. Whether supporting custom solutions and advanced requirements, or through its capability to communicate with third-party devices in your system, Power Monitoring Expert adds value now and especially over the long term.

Designed for step-by-step investment

**Scalable, flexible architecture**
> Grow to hundreds of metering points
> Integrate legacy and third-party devices
> Leverage and optimise existing infrastructure

**Interoperable**
> Share data with third-party SCADA, automation, building management, and accounting systems
> Open standards-based interoperability via ODBC, OPC, XML, Modbus, OPC Server, OPC Client, and Web Services
Customized, real-time monitoring

Smart dashboards
> Share information with your external stakeholders
> Display any parameter in your power network
> Kiosk or slide-show mode for flexible presentation options
> Combine metering of all utilities (WAGES)
> Integrate content from other web sites

Intuitive data formats
> Collect system-wide data, display, and perform calculations
> Customise views of your data
> Graphics templates and table libraries provide plug-and-play views of your facility

Alarms and events
> Trigger on complex conditions, on-screen alarm notifications
> Log all relevant data and sequence of events for diagnosis
> Flag and avert potential problems
> Acknowledge alarms with authenticated web access and audit trails

Trend, analyze, and report

Analyze data and power quality
> Trend any parameter to reveal demand peaks and track system-wide energy costs
> Identify patterns in operational usage trends
> Optimise network capacity, avoid over-building

Power quality analyses
> Monitor events and waveform plotting system-wide
> Monitor harmonics, K-factor, crest factor, symmetrical components
> Diagnose and isolate PQ problems to increase reliability
> Automatically detect and report on voltage disturbances
> Quickly evaluate PQ events plotted on standard ITIC curve

Comprehensive reports
> Sixteen preconfigured report templates to get you up and running immediately
> Options for fully-customized reports
> Manual, scheduled, or alarm/event-triggered distribution via email or web
> Options for tenant billing and cost allocation reports
See, measure, and manage critical energy data like never before
Part of a broader, integrated solution

Power monitoring made easy

Schneider Electric™ helps companies overcome challenges and achieve an efficient enterprise through our integrated solutions, namely EcoStruxure™ integrated hardware and software system architecture and StruxureWare software applications and suites. EcoStruxure architecture unifies power, process, IT room, building, and security systems. StruxureWare software allows users to see, measure, and manage critical energy data across buildings, industrial plants, and data centres.

The depth of StruxureWare Power Monitoring Expert software makes it simple to match to your operational needs, your facility's portfolio and your budget. The software is compatible with a host of devices, and new device drivers are added continuously.

<table>
<thead>
<tr>
<th>PowerLogic power and energy meters</th>
<th>Legacy power and energy meters</th>
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</thead>
<tbody>
<tr>
<td>ION8800 series</td>
<td>ION8300/8400/8500/8600</td>
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<tr>
<td>ION8650 series</td>
<td>ION7700</td>
</tr>
<tr>
<td>ION7550/ION7650, ION7550RTU</td>
<td>ION7500/7600 series</td>
</tr>
<tr>
<td>ION6200</td>
<td>ION7550RTU</td>
</tr>
<tr>
<td>PM5000 series</td>
<td>ION7300 Series (ION7300, ION7330, ION7350)</td>
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<tr>
<td>PM3000 series (PM3250, PM3255)</td>
<td>ACM3720, ACM3710, ACM3300</td>
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<tr>
<td>PM1200</td>
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<tr>
<td>PM800 series (PM810, PM820, PM850, PM870)</td>
<td>CM2000 Series (CM2050, CM2150, CM2250, CM2350, CM2450)</td>
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<tr>
<td>PM700 series (PM710, PM750)</td>
<td>CM3000 Series (CM3250, CM3350)</td>
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<tr>
<td>PM600 series (PM600, PM620, PM650)</td>
<td>CM4000 Series (CM4150, CM4250, CM4000T)</td>
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<tr>
<td>PM210, PM9C</td>
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<tr>
<td>EM5600</td>
<td>BCPM (A, B, C models)</td>
</tr>
<tr>
<td>iEM3000 series</td>
<td>Sepam series 10, 20, 40, 48, 60, 80</td>
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<tr>
<td>EM1200</td>
<td></td>
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<tr>
<td>DM6200, DM6300</td>
<td>PLCs for WAGES</td>
</tr>
<tr>
<td><strong>Insulation monitors</strong></td>
<td>Modicon Momentum M1 - TR (A8, D10, D16)</td>
</tr>
<tr>
<td>Vigilohm IM20</td>
<td>Twido Modular PLC (D12, D28, D44)</td>
</tr>
<tr>
<td><strong>Circuit breaker trip units</strong></td>
<td>Limited edition (LE) drivers for download</td>
</tr>
<tr>
<td>Micrologic A, E, P and H devices</td>
<td>Modbus-compatible devices</td>
</tr>
<tr>
<td>Micrologic Compact NSX Type A and Type E</td>
<td>Other devices through OPC</td>
</tr>
</tbody>
</table>
Investing in a power and energy monitoring system pays. It helps you manage your energy efficiently and gives you unique insight into energy-related costs, risks, and opportunities. Protect and optimize your investment by signing up to Schneider Electric Energy Management Services.

**EnergySTEP (Energy Sustainability Tiered Efficiency Program)**

Our EnergySTEP™ program is designed to help you to spot opportunities for energy saving and take action.

Our Energy Efficiency Power Consultants conduct energy efficiency and process audits on your premises to identify energy saving areas and equipment. They work to a methodology that is carefully structured to match your specific production-related energy needs.

<table>
<thead>
<tr>
<th>What our EnergySTEP teams do</th>
<th>The benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark major energy processes and items</td>
<td>Clearer view and understanding of your electricity use</td>
</tr>
<tr>
<td>Draw up energy balance sheet showing how site and its workshop perform, and define medium-term and long-term energy efficiency action plans</td>
<td>You are given energy saving solutions with their estimated ROI</td>
</tr>
<tr>
<td>Identify areas where energy savings can be made and their potential ROI</td>
<td>You can decide which action in your energy efficiency to prioritize</td>
</tr>
<tr>
<td>Recommend electricity deals and rates that will reduce your electricity bill</td>
<td>You use your energy more cost-efficiently</td>
</tr>
</tbody>
</table>

**<2 years**

*simple payback with a small initial investment*

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**EnergySTEP 1**  |  **EnergySTEP 2**  |  **EnergySTEP 3**
--- | --- | ---
EE Audit Walkthrough | ⬜️ | ⬜️
EE Detailed Audit | ⬜️ | ⬜️
EE Support Contract | | ⬜️
Protect your investment with Proactive Support

Power Monitoring Expert software is an investment in your business that you want to protect. With a Schneider Electric Proactive Support agreement, it helps you maximize your investment and ensure you have a reliable power network today and tomorrow.

There are three different Proactive Support offers available depending on your needs: Software Assurance to keep your software up to date, Maintenance Support to protect and optimize your server, and Application Support to safeguard your entire Power Monitoring Expert system.

<table>
<thead>
<tr>
<th></th>
<th>Software Assurance</th>
<th>Maintenance Support</th>
<th>Application Support</th>
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<tbody>
<tr>
<td>Receive notifications and gain access to software upgrades for 12 months.</td>
<td>●</td>
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<td>●</td>
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<tr>
<td>Gain access to the latest updates and software enhancements made available through service pack releases. Service pack installation is available through remote connection.</td>
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<tr>
<td>Optional SQL assurance: Get 12 months of access to SQL upgrades made available by Microsoft. (Must be purchased in conjunction with SQL license.)</td>
<td>Optional</td>
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<tr>
<td>Receive quarterly system audits to review and report on the state of your application and database servers. Includes suggested next steps for performance optimization, database trimming/archiving, etc.</td>
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<td>Receive a monthly, scheduled backup of system database and configuration at a secure Schneider Electric data center. Provides important repository of system information in the event of disaster.</td>
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<td>Gain knowledge with a 2-hour system orientation session scheduled at the start of the contract period.</td>
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<td>Receive priority telephone and email support. Get up to 15 hours of direct access to a dedicated team of support engineers to address immediate concerns and questions.</td>
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<tr>
<td>Receive goal-based, proactive system support. We schedule six calls annually to address your specific system performance and operation goals.</td>
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<td>Remote access for troubleshooting (support engineers will provide ability to remotely connect to system anywhere in the world to speed case resolution and to aid in troubleshooting)</td>
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<tr>
<td>Receive technical assistance for any system updates or configurations to your base system software.</td>
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</tr>
<tr>
<td>Optional dedicated senior support engineer. We assign a support engineer to serve as your primary point of contact for all reactive and proactive support needs.</td>
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<tr>
<td>Optional 24x5 after-hours support: Extended support coverage provides you with piece of mind in case you require critical assistance after normal business hours.</td>
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<td>Optional</td>
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</table>