Optimize your power network with data-driven decisions

StruxureWare Power Monitoring Expert software delivers the integrated information for maximizing network reliability and performance





Power Monitoring

Schneider Electric



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

Enhanced data visibility for improved performance across your facility



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, cuttingedge 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.

30%

Monitoring and control systems can save you up to 30% of your annual energy consumption



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, realtime 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

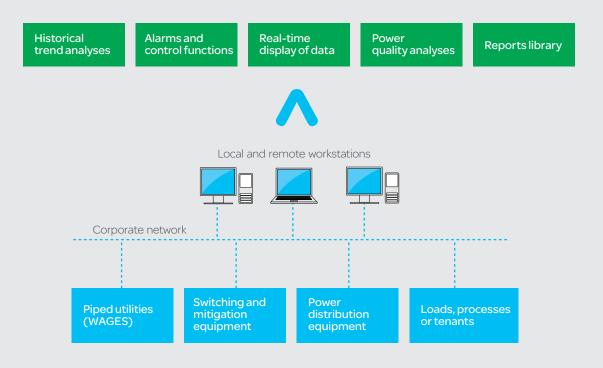
- > Validate utility bills, document errors, and measure energy contract compliance
- Identify false penalty charges and validate benefits of on-site generation

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 measures with quick results



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

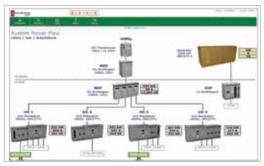
 Real-time and historical data reveals relationships between equipment and the conditions affecting system stability

Expand your energy capabilities



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



Integrated data from the whole network

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



Attractive dashboard displays



Alarm and event displays



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 overbuilding

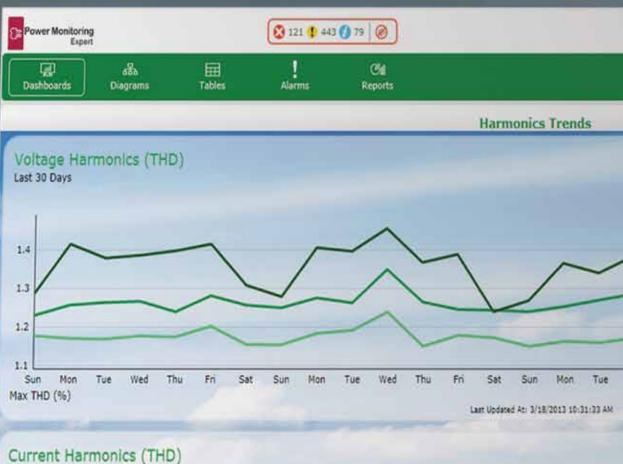
Power quality analyses

- > 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/eventtriggered distribution via email or web
- Options for tenant billing and cost allocation reports

See, measure, and manage critical energy data like never before



Last 30 Days

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.

PowerLogic power and energy meters	Legacy power and energy meters		
ION8800 series	ION8300/8400/8500/8600		
ION8650 series	ION7700		
ION7550/ION7650, ION7550RTU	ION7500/7600 series		
ION6200	ION7550RTU		
PM5000 series	ION7300 Series (ION7300, ION7330, ION7350)		
PM3000 series (PM3250, PM3255)	ACM3720, ACM3710, ACM3300		
PM1200	PowerLogic circuit monitors		
PM800 series (PM810, PM820, PM850, PM870)	CM2000 Series (CM2050, CM2150, CM2250, CM2350, CM2450)		
PM700 series (PM710, PM750)	CM3000 Series (CM3250, CM3350)		
PM600 series (PM600, PM620, PM650)	CM4000 Series (CM4150, CM4250, CM4000T		
PM210, PM9C	PowerLogic branch circuit power meters		
EM5600	BCPM (A, B, C models)		
iEM3000 series	Protective relays		
EM1200	Sepam series 10, 20, 40, 48, 60, 80		
DM6200, DM6300	PLCs for WAGES		
Insulation monitors	Modicon Momentum M1 - TR (A8, D10, D16)		
Vigilohm IM20	Twido Modular PLC (D12, D28, D44)		
Circuit breaker trip units	Limited edition (LE) drivers for download		
Micrologic A, E, P and H devices	Modbus-compatible devices		
Micrologic Compact NSX Type A and Type E	Other devices through OPC		

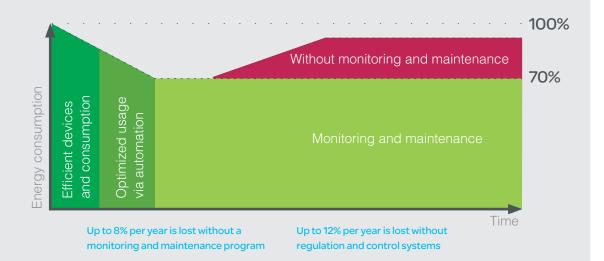
ION

Power Monitoring Expert is fully compatible with ION technology

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Sustain your gains with our services

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.

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

	EnergySTEP 1	EnergySTEP 2	EnergySTEP 3
EE Audit Walkthrough	•	•	•
EE Detailed Audit		•	•
EE Support Contract			•



simple payback with a small initial investment

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.

	Software Assurance	Maintenance Support	Application Support
Receive notifications and gain access to software upgrades for 12 months.	•		•
Gain access to the latest updates and software enhancements made available through service pack releases. Service pack installation is available through remote connection.	٠		•
Optional SQL assurance: Get 12 months of access to SQL upgrades made available by Microsoft. (Must be purchased in conjunction with SQL license.)	Optional		Optional
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.		•	•
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.		•	•
Gain knowledge with a 2-hour system orientation session scheduled at the start of the contract period.			•
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.			•
Receive goal-based, proactive system support. We schedule six calls annually to address your specific system performance and operation goals.			•
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)			•
Receive technical assistance for any system updates or configurations to your base system software.			•
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.			Optional
Optional 24x5 after-hours support: Extended support coverage provides you with piece of mind in case you require critical assistance after normal business hours.			Optional





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