Purpose-built to keep your power reliable and efficient

EcoStruxure™ Power Monitoring Expert

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PME

Award-winning EcoStruxure Power Monitoring Expert

Your facility's power is critical to your operations. Disruptions impact productivity and safety, and wasted energy and equipment failures affect your bottom line. You need a way to reveal hidden risk and opportunities.

Award-winning EcoStruxure™ Power Monitoring Expert (PME) is purpose-built to help power-critical and energy-intensive facilities maximize uptime and operational efficiency. As a key element of EcoStruxure Power, PME is the window to your digitized power network, taking advantage of IoT connectivity and distributed intelligence.

As power grid technology becomes more dynamic, systems more complex and regulations more challenging, PME brings unique new capabilities that make it simpler to protect people and assets, keep operations running and save time and money.

Gain valuable insight into your power network

Power Monitoring Expert gives insight into electrical system health and energy efficiency so you can make informed decisions to improve performance.

Open, scalable architecture

PME connects to smart devices across your electrical system – power and energy meters, protective relays and circuit breakers, RTUs and PLCs, VSDs, UPS, and PQ mitigation equipment – and integrates with process control systems and many other enterprise platforms.

Convert data to action

Customizable and intuitive web interface allows real-time power and equipment monitoring. Use PME to track KPIs for energy and reliability, or share energy, sustainability and PQ metrics with stakeholders. Apply advanced power quality analysis to ensure reliable network operation, equipment performance and reduced network outages.

The future of power management is here

Innovative features unlock your power distribution system's full potential

- Reinvented alarm management with smart events and alarms clustering for intuitive and powerful filtering, searching and categorization of events and alarms

- Graphical timeline analysis tools easily analyze events and alarms sequence, location and potential impact

- The most advanced energy visualization and analysis tools to calculate, model, forecast and track your main energy performance indicators (EnPIs)
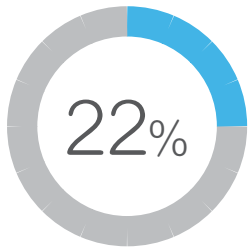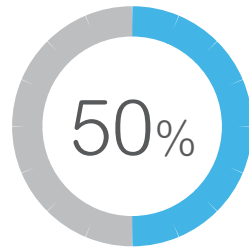
Meet any challenge

Keep people and assets safer

- Monitor breaker protection settings and ensure proper breaker operation and fault isolation to avoid safety hazards

- Operate breakers remotely to minimize exposure to arc-flash risk

- Detect abnormal conditions, such as rising busbar temperatures, that represent a risk to safety and operations

- Protect patient safety in hospital operating rooms by monitoring and locating circuit insulation faults

22% of fires in a facility are due to electrical equipment failures

50% of electrocutions occur within facilities

Optimize business reliability and continuity

- Understand the cause of events affecting your electrical system, using advanced power forensics including smart alarm clustering and graphical events timeline

- Identify power event patterns to avoid or mitigate future occurrences

- Monitor protection settings to ensure proper isolation of faults to avoid system wide power outages

- Analyze the aging of breaker contacts to avoid failures and enable proactive maintenance

- Track system capacity to avoid overloads and make sure backup power systems are able to handle loads in case of an outage
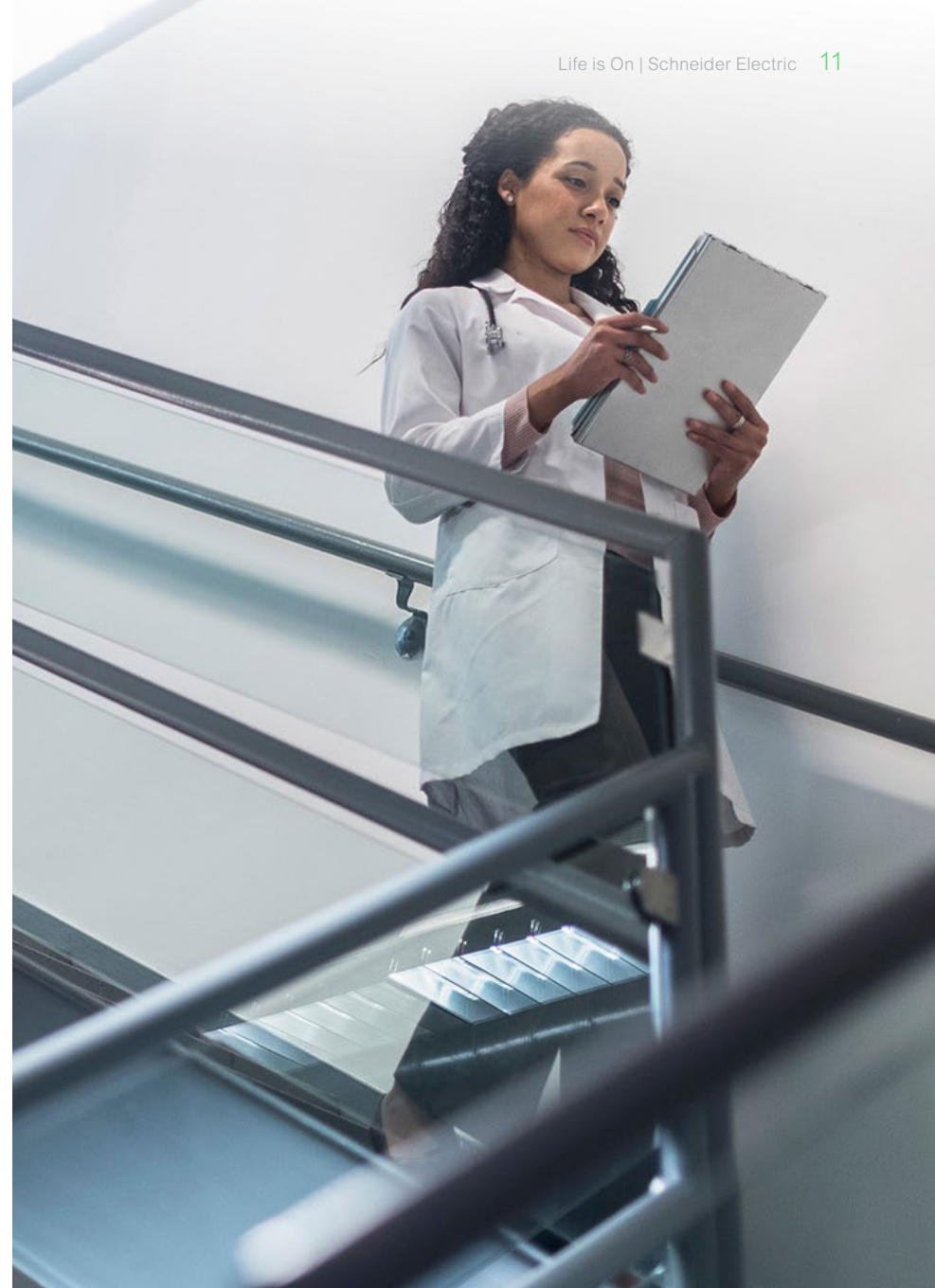
Maximize operational lifecycle efficiency

• Use energy benchmarking to reveal opportunities and baseline comparisons to validate savings

• Use trending and energy modeling to identify abnormal usage of energy and other utilities (WAGES)

• Avoid power factor and peak demand penalties

• Use shadow billing to identify errors in utility bills

• Enable participation in demand response programs by tracking consumption patterns and managing loads

• Create accountability by allocating costs to departments or processes

• Analyze equipment performance to support proactive maintenance and extend lifespan

• Reveal unused system capacity to avoid upgrading or overbuilding

Simplify reporting and compliance

- Align with energy efficiency and green building standards (e.g. ISO 50001/2/6, SEP, LEED, NABERS)

- Track energy performance indicators (EnPI) as per ISO50006 (e.g. kWh/ton, kg of CO2/ton, kWh/m3 of water pumped)

- Verify utility/grid service and internal compliance to power quality standards (e.g. EN50160, IEEE519, ITIC)

- In healthcare facilities, ensure regulatory compliance with backup power system testing (e.g. NFPA110 and others)

- Comply with common IT practices (password management, whitelisting, preferred browser) and align with cybersecurity best practices (e.g. IEC 62443 4-1 and 4-2 (SL1 Certified))
  [Read the whitepaper](#)

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Perfect for your business

Perfect for your business

Choose a segment below to see what Power Monitoring Expert can do for your facility.

Industry ▶

Power is a critical component of your production and can affect your profitability and competitiveness. EcoStruxure Power Monitoring Expert mitigates this risk and increases productivity. Compare energy efficiency across buildings, plants or process lines.

Analyze energy consumption by load type, analyze facility energy performance, and ensure energy efficiency compliance. Enable proactive maintenance to ensure safety, and simplify power quality monitoring and analysis to protect your sensitive equipment.

Perfect for your business

Choose a segment below to see what Power Monitoring Expert can do for your facility.

Data centers ▶

Ensuring 24/7 operations places power network reliability, efficiency and compliance among the most serious issues data centers face today.

Unplanned power losses average $1 million and a compromised reputation. EcoStruxure Power Monitoring Expert provides maximum uptime and full visibility into your power system, helps restore power quickly and safely after a crisis and improves your data center performance without compromising power availability or reliability. Ensure business continuity in any circumstance.

Perfect for your business

Choose a segment below to see what Power Monitoring Expert can do for your facility.

Hospitals are under increasing pressure to do more with less, while also complying with strict regulations and ever-changing technology.

Healthcare ▶

Designed for the always-on power environment in clinical care settings, EcoStruxure Power Monitoring Expert allows tracking of real-time power conditions to help improve efficiency and reliability. It also helps prevent power quality issues and to reduce energy use and costs. Embrace a purpose-built power infrastructure that supports your future needs and helps ensure patient safety.

EcoStruxure™ Power helps to keep the power distribution system available, reliable and efficient in a healthcare facility. **Watch the video!**

Perfect for your business

Choose a segment below to see what Power Monitoring Expert can do for your facility.

Improving building performance – financial, energy or otherwise – is always top of mind. EcoStruxure Power Monitoring Expert helps lower maintenance costs, reduce energy consumption, increase equipment life span and increase occupant comfort and productivity.

Buildings ▶

It can even predict future energy consumption based on external temperature, occupancy or other variables. Establish energy efficiency benchmarks and make informed decisions that reduce energy consumption to improve your building's energy performance.

Perfect for your business

Choose a segment below to see what Power Monitoring Expert can do for your facility.

Critical infrastructure networks like air, rail and water transportation are complex. They must operate safely, reliably and efficiently and be regulatory compliant.

EcoStruxure Power Monitoring Expert software architecture is designed to be easily integrated into existing critical systems, as well as to be open and scalable. Track real-time and historic data, manage proactive maintenance schedules and monitor facilities, assets and power network functionality to ensure maximum uptime and efficiency.

Transportation ▶

EcoStruxure™ Power

Future-ready power systems

EcoStruxure Power delivers more safe, reliable and efficient power for peace of mind and significant financial benefits. IoT-enabled future-proof solutions are tailored to meet your specific needs and simply work. Our digitized LV and MV solutions are powered by innovation at every level enabling enhanced connectivity, real-time operations and smart analytics.

IoT-connected solutions ready to improve every aspect of your electrical distribution system. Take total control with real-time data and smart analytics for predictive maintenance.

Discover more about
Ecostruxure Power

Learn more

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