

# Purpose-built to keep your power reliable and efficient

EcoStruxure<sup>™</sup> Power Monitoring Expert

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### Schneider Gelectric Life Is On



### Table of contents







3

### Ideal for your business

2



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### 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 risks and opportunities.

Award-winning EcoStruxure Power Monitoring Expert is purpose-built to help powercritical and energy-intensive facilities:

- Digitize power network
- Increase electrical safety
- Maximize power availability
- Improve efficiency and sustainability

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

EcoStruxure Power Monitoring Expert simplifies management of complex power systems. Watch the video

### Gain valuable insight into your power network

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



**Open and secured architecture** that connects to smart devices across your electrical system – power and energy meters, electric vehicle (EV) systems, protective relays and circuit breakers, RTUs and PLCs, VSDs, UPS and power quality (PQ) mitigation equipment – and integrates with process control systems and many other enterprise platforms.



Convert data to action with a customizable and intuitive web interface to allow real-time power and equipment monitoring. Track key performance indicators (KPIs) for energy and reliability, or share energy, sustainability and PQ metrics with stakeholders. Apply advanced PQ analysis to identify the cause of disturbances and ensure reliable network operation, equipment performance, and reduced network outages.



Unlock your power system's full potential with smart alarm management that clusters events and alarms for intuitive and powerful filtering, searching and categorizing of events and alarms. Graphical timeline analysis tools easily analyze events and alarm sequence, location, and potential impact.



Use advanced energy visualization and analysis tools to identify, calculate and track your main energy performance indicators (EnPIs), and help you audit and refine energy policy to have continuous improvement in energy performance.





110 miles



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





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 PQ monitoring and analysis to protect your sensitive equipment.



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





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

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



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





### Healthcare



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

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.



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





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

It can even predict future energy consumption based on energy model and influencing variables, such as outside temperature, occupancy, and production forecast. Establish energy efficiency benchmarks and make informed decisions that optimize energy consumption to continuously improve and your building's energy performance.



Choose a segment below to see what EcoStruxure 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 with regulatory compliance.

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.



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### Meet today's challenges



### Keep people and assets safer

EcoStruxure Power Monitoring Expert helps you put electrical safety first, reducing hazards and supplying the technology to prioritize safety.

- Monitor breaker protection settings and ensure proper breaker operation and fault isolation to avoid safety hazards
- Monitor arc-flash risk and arc fault alarms
- 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





### Optimize business reliability and continuity

EcoStruxure Power Monitoring Expert helps keep the power, and your business, running so you can focus on what matters most: business operations. There is a significant increase in sensitive electronic systems and devices requiring guaranteed uptime and have no tolerance for power quality disturbances.

- 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

It's important to identify underperforming electrical assets, process bottlenecks, and identify high-performing areas. With EcoStruxure Power Monitoring Expert you can quickly perform formal audits, metrics analyses, and cost allocation to help you quickly evaluate operations in your facility.

- 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 utility bill errors
- 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 the lifespan
- Reveal unused system capacity to avoid upgrading or overbuilding





### Simplify reporting and compliance

A single business can generate millions of compliance data points quickly. With EcoStruxure Power Monitoring Expert you can aggregate this data across multiple processes or facilities and generate compliance reports that meet ever-changing standards and identify KPIs.

- Align with energy efficiency and green building standards (e.g., ISO 50001/2, SEP, LEED, NABERS)
- Track energy performance indicators (EnPI) as per ISO 50006 (e.g., kWh/ton, kg of CO<sub>2</sub>/ton, kWh/m<sup>3</sup> of water pumped)
- Verify utility/grid service and internal compliance to power quality standards (e.g., EN50160, IEC 61000-2-4, IEEE 519, ITIC)
- In healthcare facilities, ensure regulatory compliance with backup power system testing (e.g., NFPA 110 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)













## Go further with EcoStruxure



### Innovation at every level

clean, reliable power systems.

EcoStruxure is Schneider Electric's IoT-enabled, plug-and-play, open, interoperable architecture and platform that unites power and building management with connected devices, edge control software, and digital services for enhanced productivity, and improved resilience.

Helps ensure safe delivery and operation of







### Helps improve sustainability and resiliency while reducing costs.

Sustainable

Safe



### Available

Enhance electrical asset management and avoid electrical downtime.

### Cybersecure

Helps ensure resilience to cyber threats that impact business operations.

### Learn more

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To learn more information about Schneider Electric power management and control, visit

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