Get the clear picture of your building's power network

EcoStruxure™ PowerTag System
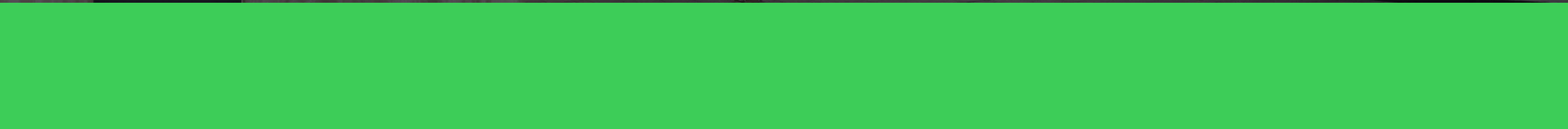
se.com/powertag

Life Is On | **Schneider** Electric

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Discover the PowerTag System

Robust load-level energy monitoring

Finally, an optimized energy monitoring system that is simple to install and operate. The PowerTag System – wireless Energy Sensors, Control devices and PowerTag Link gateway – work together seamlessly to provide a refined, accurate view of how energy is used at every level, from the incoming circuit to the final electrical load.

PowerTag System combines the experience and power of Schneider Electric's world-class solutions and is a key innovation within our EcoStruxure platform, our IoT-enabled power management solutions that enhance connectivity, real-time operational reliability and smart analytics.

PowerTag System is a powerful enabler of energy usage analysis, monitoring, alarming, and control capabilities close to final loads.
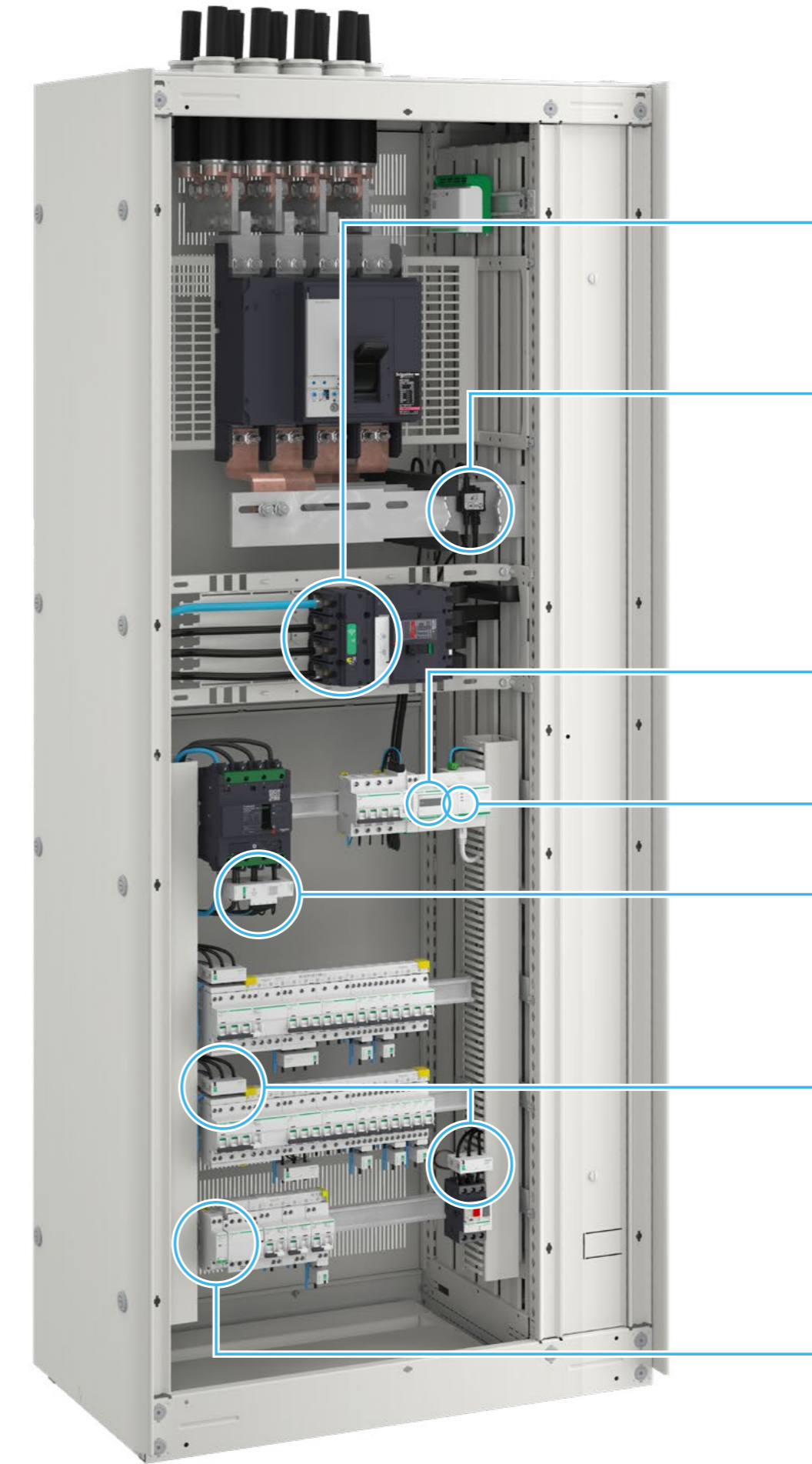
PowerTag Energy,
one major innovation

Use energy more efficiently and economically with PowerTag Energy on all electrical loads. With alerts, alarming and cost allocation capabilities, PowerTag System helps improve your operational efficiency, reduce risk of downtime and provide complete peace of mind.

No additional space in the panel: The smallest energy sensor available, PowerTag Energy is an industry-leading innovation and the only energy sensor that can tag to the breaker

Ease of installation: The only wireless energy sensor available today, PowerTag Energy greatly reduces installation time by up to 90% – with no need to add communication cables

Modular and adaptable: Perfectly suited to adapt to changing business needs, energy regulations or certifications, retrofit applications and competitor devices

Advanced connectivity: An innovation that leverages advancements in IoT, mobility, sensing and cybersecurity to help enable our open, interoperable, IoT-enabled EcoStruxure™ platform

Explore the
PowerTag System

Monitor your electrical assets

PowerTag System delivers wireless communication inside the electrical panel, fully tested for electromagnetic compatibility (EMC). It assists your ISO 50001 goals and supports your energy efficiency and carbon footprint reduction targets.

The PowerTag System lets facility managers monitor energy consumption at the load. Load-level data greatly improves visibility into facility energy demands, makes it easier to understand energy use and provides new details that can be used for data-driven business decisions. For example, with a power monitoring system like EcoStruxure Power Monitoring Expert, this data can be used to profile energy demands of specific systems to detect inefficiencies or areas for improvement.

Explore PowerTag Energy 63 A

A scalable, compact design for all segments, a perfect solution for retrofit or new panels

PowerTag Energy 63 A fits directly on the protective device with no impact on switchboard size. Voltage and current are measured at the same point of the circuit. 'Tag' the head of groups to monitor energy use (lighting, sockets, etc.), or tag terminal devices to monitor critical loads like IT, HVAC or cold room to help ensure continuity of service and energy consumption.

Values measured in accordance with the IEC 61557-12 standard:
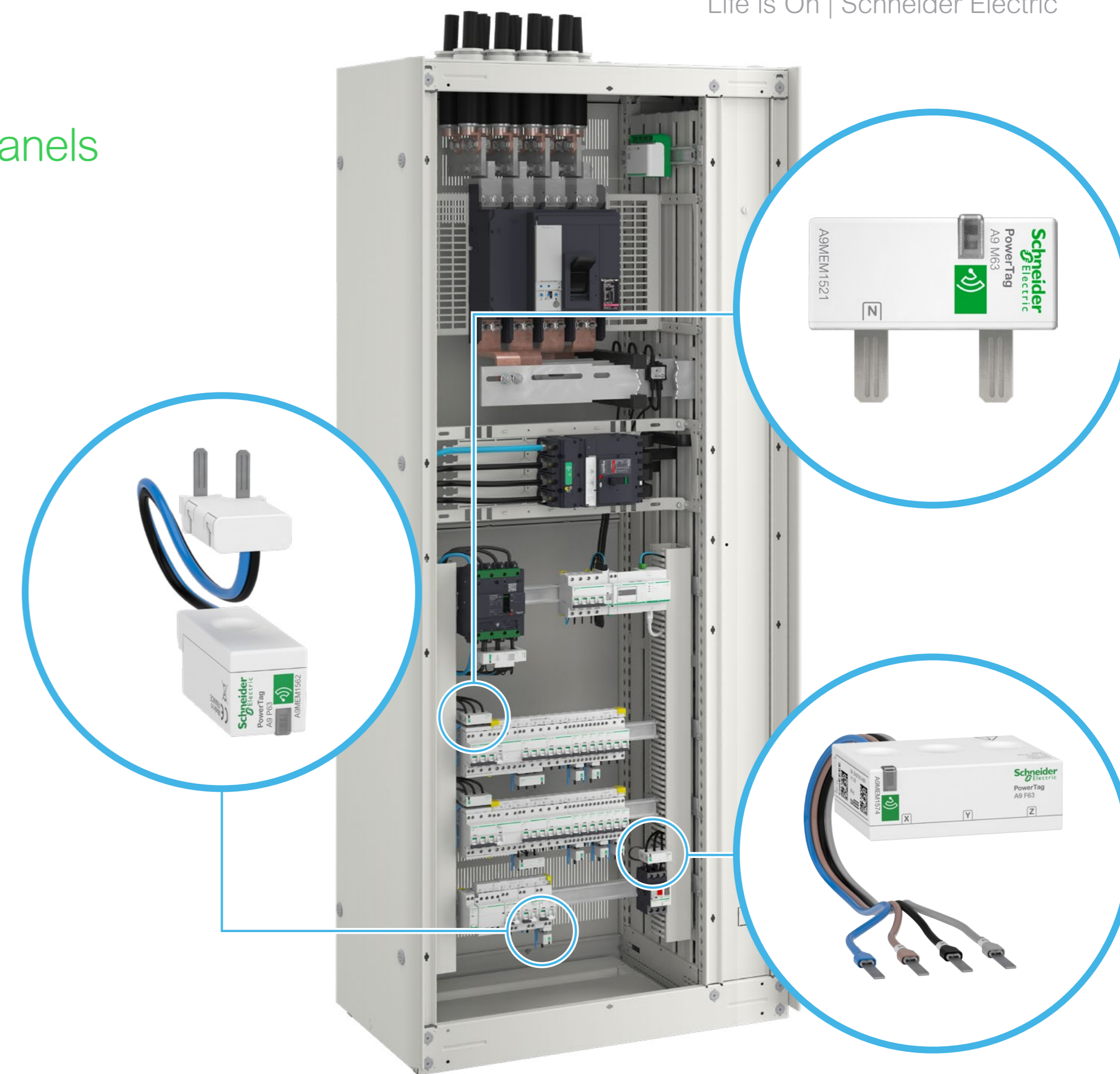
Energy

- Active energy (Class 1), total and partial (kWh)

Real Time

- Phase-to-neutral and phase-to-phase voltage (V)
- Current per phase (A)
- Power factor
- Active power, total and per phase (W)
- Apparent power total (VA)

Alarm

- Voltage loss

Explore PowerTag Energy 160 A

A scalable, compact design for all segments, a perfect solution for retrofit or new panels

With its flexible design, PowerTag Energy F160 can be used on many products or group of loads up to 160 A on 3P or 3P+N networks. Its removable spring connector for voltage picking simplifies installation, and shapes for brackets allow to mount and maintain it where needed in a panel.

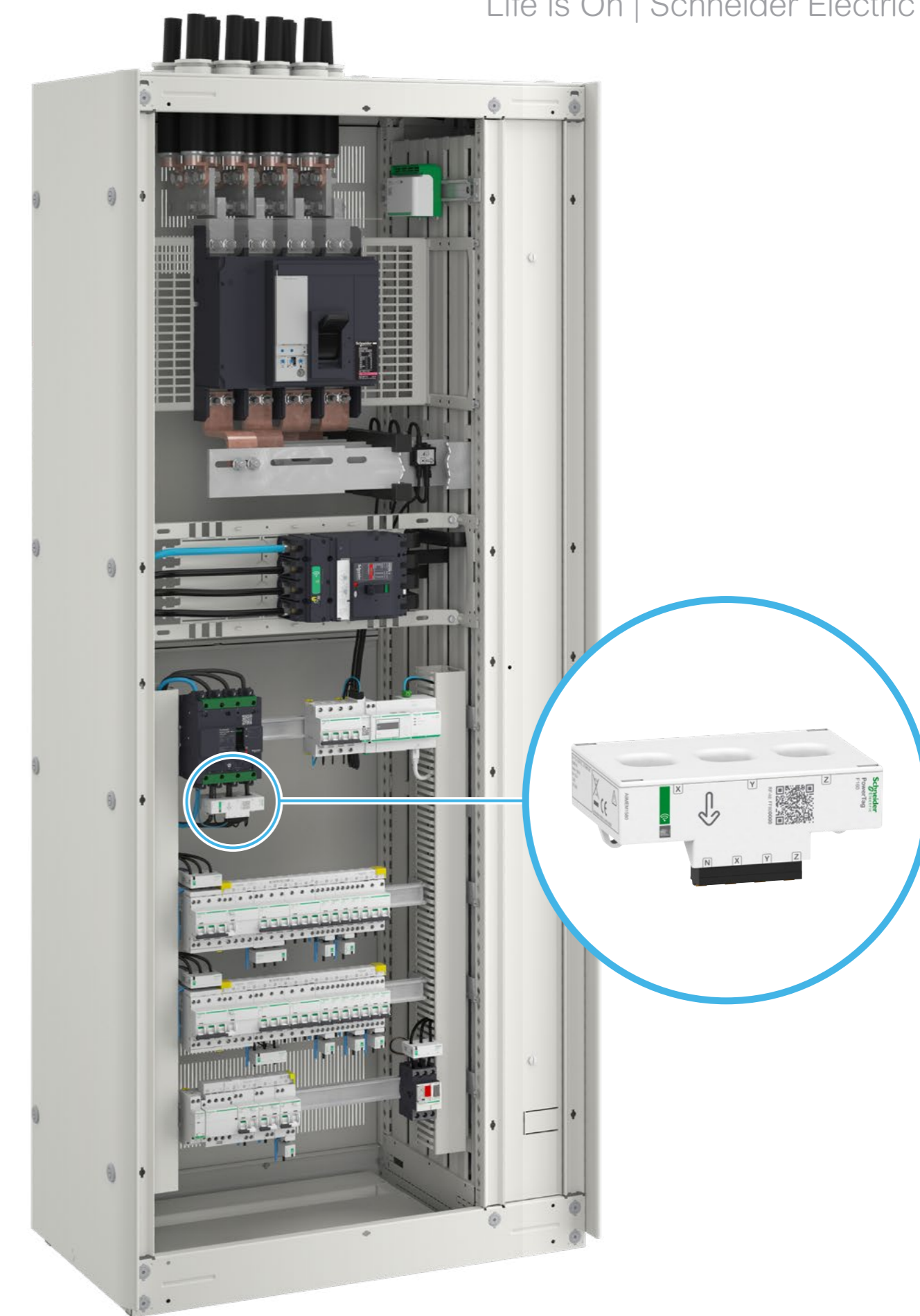Values measured in accordance with the IEC 61557-12 standard:

Energy

- Active energy received/delivered (Class 1), total and partial (kWh)
- Reactive energy received/delivered, total and partial (kVARh)
- Apparent energy, total and partial (kVAh)

Real Time

- Phase-to-neutral and phase-to-phase voltage (V)
- Current per phase (A)
- Power factor
- Active power, total and per phase (W)

- Reactive power, total and per phase (VAR)
- Apparent power, total and per phase (VA)
- Frequency (Hz)

Alarm

- Voltage loss

Explore PowerTag Energy 250/630 A

A scalable, compact design for all segments, a perfect solution for retrofit or new panels

PowerTag Energy 250/630 A is mounted directly on the bottom side of a ComPact NSX, INS, INV, or TeSys GV5, GV6, GV7 with limited impact on switchboard size. Compared to traditional metering solutions, installation time is greatly reduced with no wiring for an error-proof installation and built-in Class 1 accuracy.

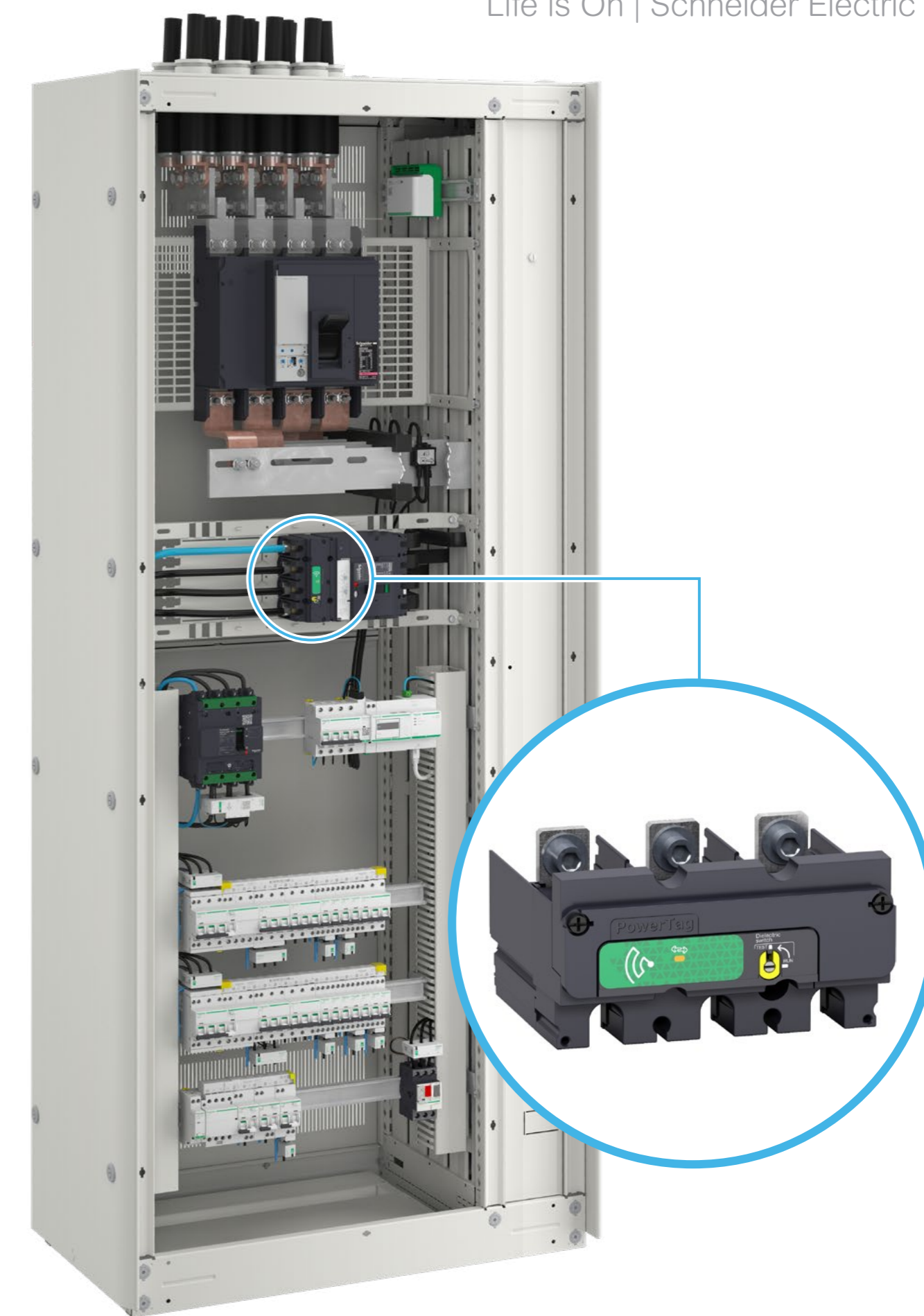Values measured in accordance with the IEC 61557-12 standard:

Energy

- Active energy received/delivered (Class 1), total and partial (kWh)
- Reactive energy received/delivered partial (kVARh)

Real Time

- Phase-to-neutral and phase-to-phase voltage (V)
- Current per phase (A)
- Power factor
- Active power, total and per phase (W)

- Reactive power total (VAR)
- Apparent power total (VA)
- Frequency (Hz)

Alarm

- Voltage loss

Explore PowerTag Energy Rope 200 to 2000 A

A scalable, compact design for all segments, a perfect solution for retrofit or new panels

With its flexible and openable current sensors, PowerTag Energy Rope can be installed easily on busbars and cables without having to disconnect the conductors. Its removable spring connector for voltage picking facilitates its installation, and the module can be mounted on a DIN rail or with brackets to fit wherever it is needed in a panel. Four ratings are available: 200 A, 600 A, 1000 A, 2000 A.

Values measured in accordance with the IEC 61557-12 standard:

Energy

- Active energy received/delivered (Class 1), total and partial (kWh)
- Reactive energy received/delivered, total and partial (kVARh)
- Apparent energy, total and partial (kVAh)

Real Time

- Phase-to-neutral and phase-to-phase voltage (V)
- Current per phase (A)
- Power factor
- Active power, total and per phase (W)

- Reactive power, total and per phase (VAR)
- Apparent power, total and per phase (VA)
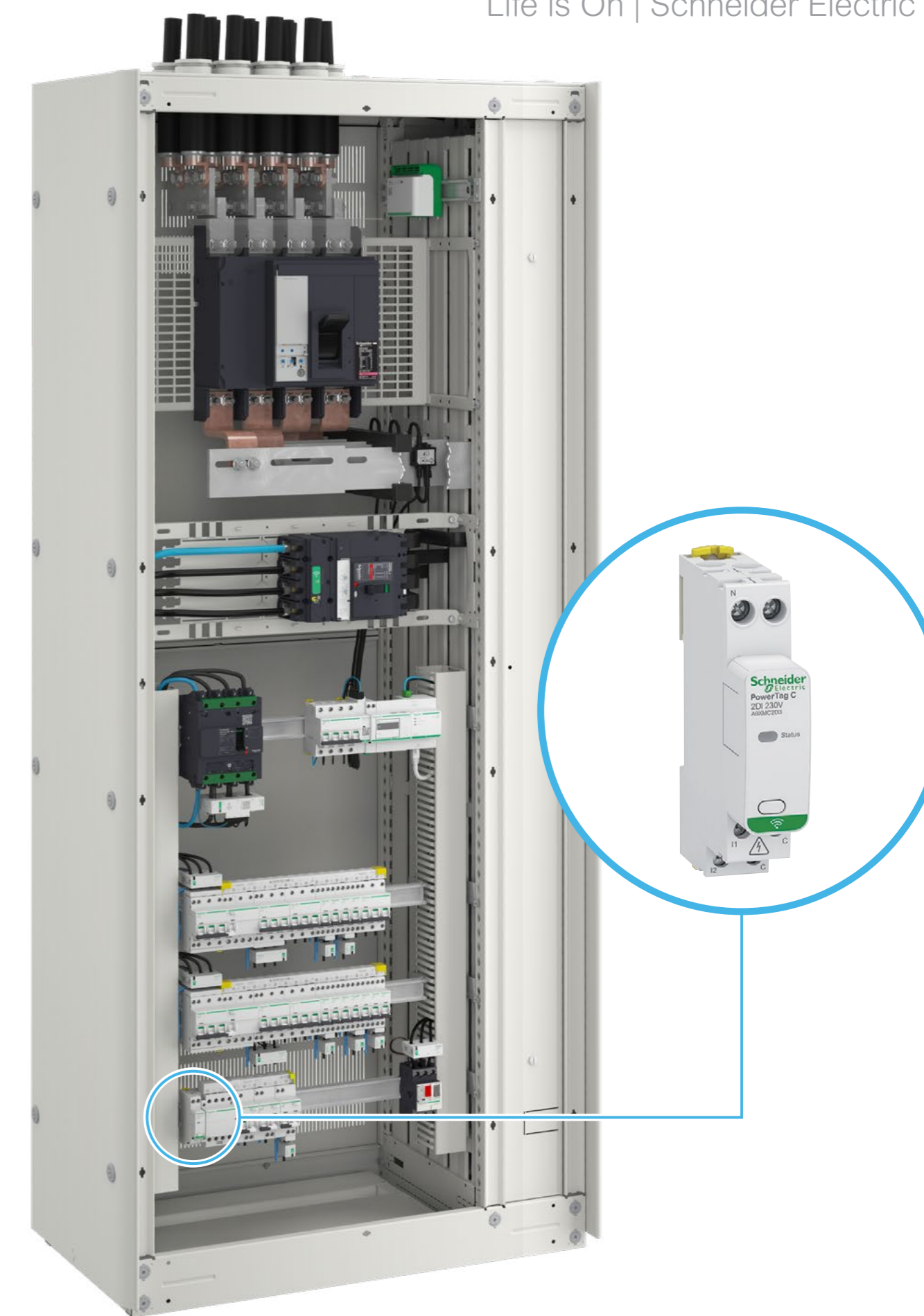- Frequency (Hz)

Alarm

- Voltage loss
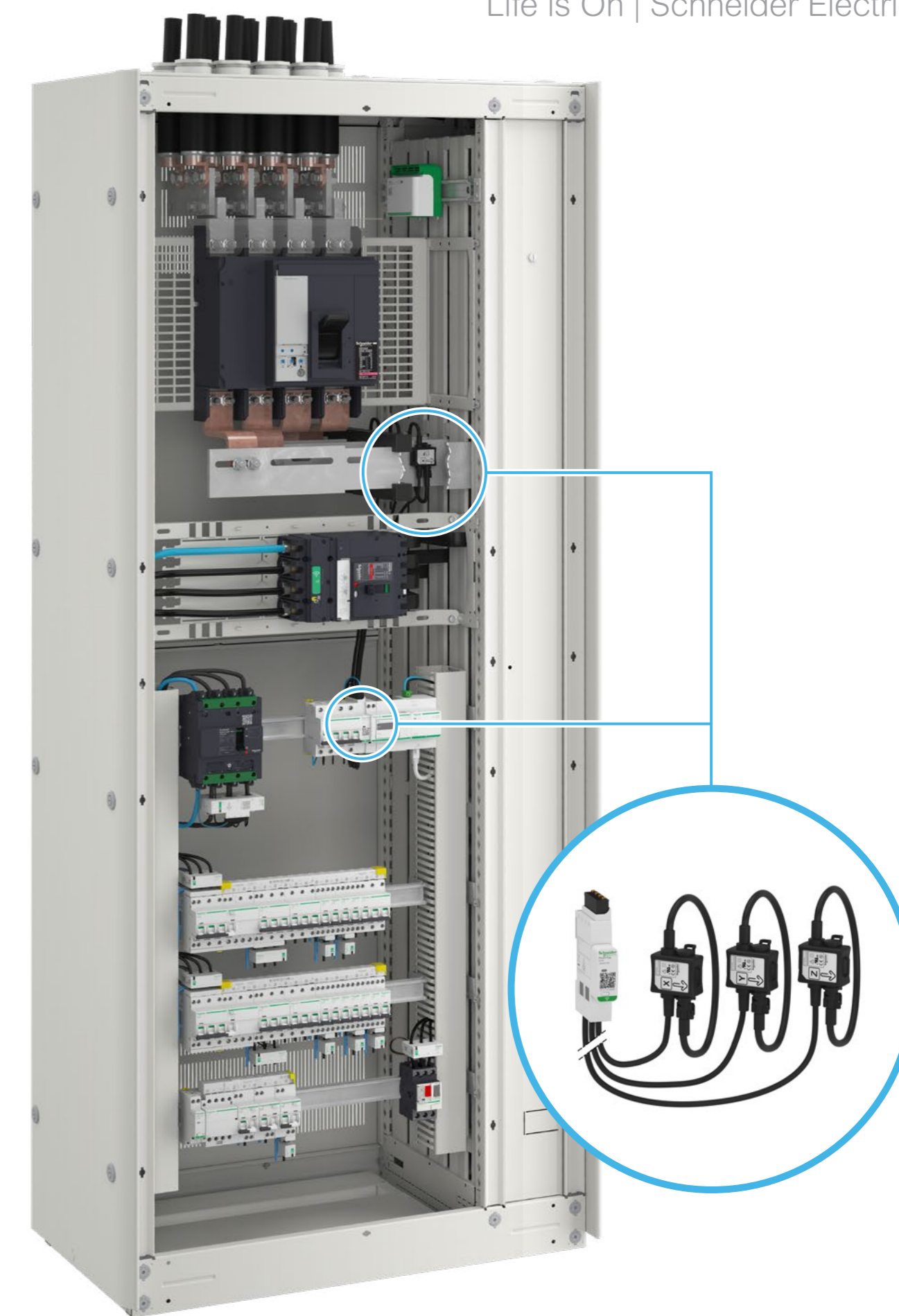
Explore PowerTag Control

A scalable, compact design for all segments, a perfect solution for retrofit or new panels

PowerTag Control monitors circuits wirelessly, collecting status of daisy-chained circuit breakers and notifying the data concentrator of information status, such as OF, SD, Contractor or Impulse Relay position indication.

These wireless input/output modules allow circuit control and status monitoring. Designed for use in commercial and building applications, they quickly and easily turn your distribution board into a connected panel.

PowerTag Control also connects to pulse relays or contactors for remote control within a building management system for non-critical loads, such as lighting.

Explore PowerTag Link

A scalable, compact design for all segments, a perfect solution for retrofit or new panels

Perfect for high-density panels, PowerTag Link is an Ethernet-connected concentrator (Modbus TCP/IP) for wireless devices on EcoStruxure platforms. When integrated with PowerTag Energy sensors, it can manage alarms via email for terminal loads and accurately measure energy, power, current and voltage in real time. The entire system is designed to install easily in new and existing switchboards using any type of circuit breakers.

Concentrating data from wireless devices permits load monitoring, alarm management (including pre-alarms on predefined thresholds). Data and alarms can be displayed thanks to embedded web pages or a wireless display. The wireless display is a cost effective HMI to let local operator access to the data and critical alarms from maximum 20 wireless devices. Pairing and testing these devices is made simple with free EcoStruxure Power Commission software.

PowerTag Link provides one single Ethernet access point for your entire switchboard.
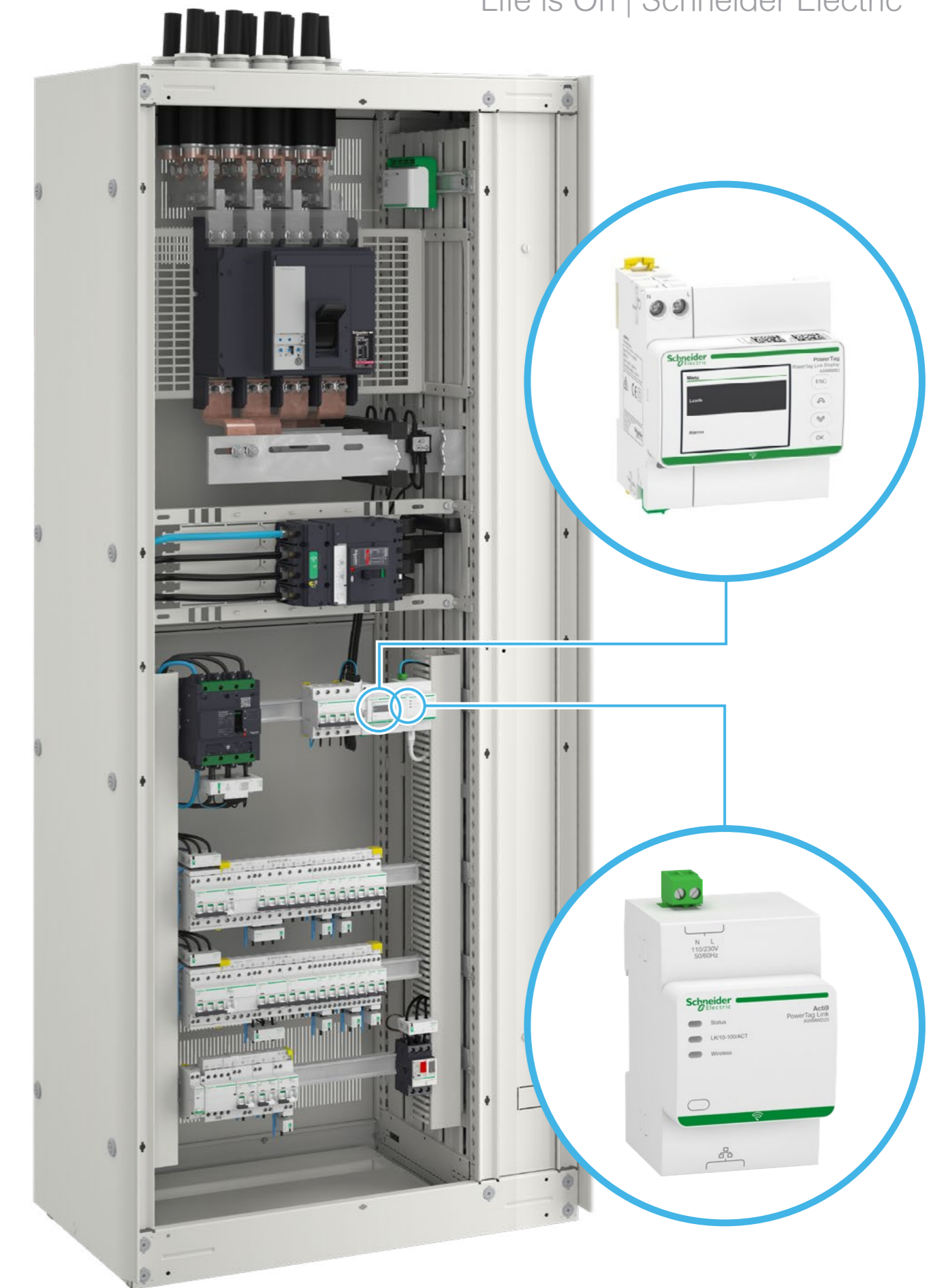
Perfect for
your business

Commercial buildings

The PowerTag System connects to EcoStruxure solutions or to any building monitoring system (BMS) or SCADA system, enabling:

- Energy metering close to final loads
  - Compliance with local standards
  - ISO 50001 certification
  - Energy cost allocation
  - Energy zone and usage analysis

- Load monitoring
  - Status of sensitive loads
  - Abnormal electrical situations

- Configurable alarms

PowerTag System empowers simple, efficient monitoring that optimizes energy consumption, enables preventive maintenance and improves electrical system operations. It's perfect for commercial malls, office buildings and even multi-residential sites.

Institución Ferial de Madrid, or IFEMA, the biggest fair operator in Spain, needed real-time consumption data and improved quality of service and energy supply for its 3.5 million annual visitors. The PowerTag System is now an added value for their clients!

Data centers

PowerTag System improves availability and anticipates and reduces downtime with pre-alarm and live-disconnection capabilities. Energy cost allocation reports help enable and support energy efficiency initiatives.

- Optimize your server rooms
  - Meet connectivity needs - energy management, alarm notifications, real-time monitoring at rack server level
  - More space for IT servers - up to 30% footprint reduction compared to PDU with traditional metering features
  - Seamless design - no need to alter work processes, just add to architectures
  - Optimize TCO - wireless, compact features enable cost savings, faster configuration and supervision integration

- Robust, well-managed installations
  - Fast and simple - plug & play wireless sensors fit perfectly onto circuit breakers
  - Reduced commissioning time - from configuration to supervision system integration
  - Project under control - PDU delivered with formal Factory Acceptance Test to assess performance of communication system

Have limited panel space and too many cables? The PowerTag System can meet the challenge and adapt for future capacity.

Power critical facilities

The main goal for any critical facility or process is to keep the power on. PowerTag System offers 24/7 access to real-time information, threshold notifications and alarms to put you ahead of any power issues. PowerTag System also gives you the ability to expand as your business needs change, as regulations require or as your need for digital intelligence grows.

EcoStruxure Power edge control software and solutions provide detailed preventative views into the electrical infrastructure to help mitigate the events that put your whole business at risk and quickly pinpoint the root cause of power system failures.

PowerTag was a key part of the solution that helped Dreamtech, a Korean electronics manufacturer, to integrate its disparate systems and uncover savings of 100 k€ in annual energy and maintenance, for an ROI of just 2 years!

Take it further with EcoStruxure

Integrated building and power management:
Connected devices, edge control software and digital
services for enhanced productivity and improved resilience

EcoStruxure innovation at every level

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.

EcoStruxure simplifies your operations and provides the insights and decision support you need to maximize:
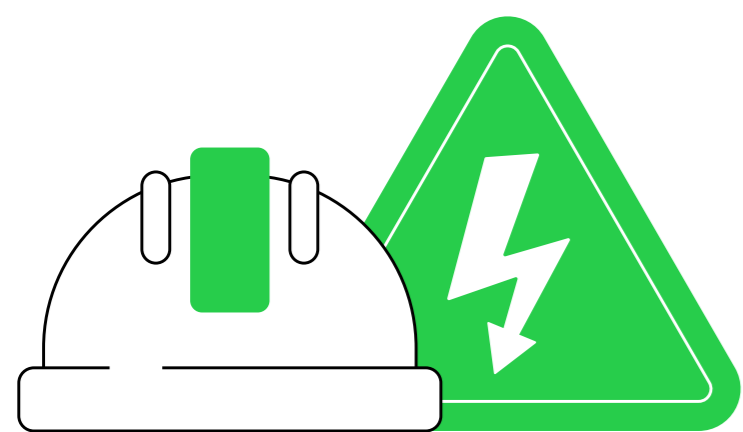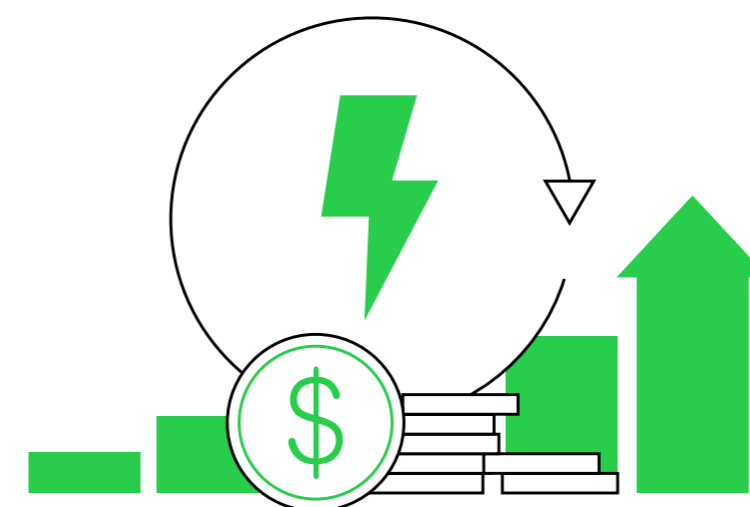
Safety

Reduce risk of electrical fires, ensure safe operation of electrical systems and protect staff and patients from electrocution and shock.
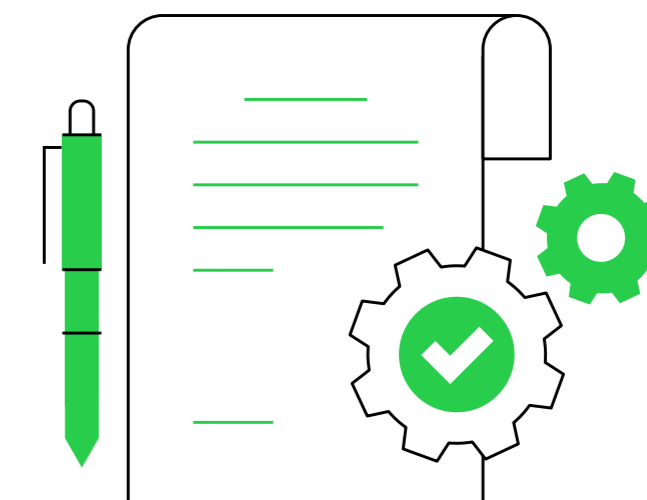
Availability

Gain resilience with distributed energy resources, enhance electrical asset maintenance and avoid unplanned downtime from electrical failure.

Efficiency

Reduce energy usage and costs, improve operational efficiency and achieve greater sustainability.

Compliance

Adhere to local and international standards for faster project execution and simplified regulatory compliance.

EcoStruxure edge control software

Future-proof your facility with EcoStruxure supervisory software to get the right information to the right people at the right time. Our edge control software platforms are engineered to work together to provide real-time visibility of electrical and critical building infrastructure and allow you to control the environmental conditions in every part of your facility.

EcoStruxure
Power SCADA Operation

EcoStruxure
Power Monitoring Expert

EcoStruxure
Building Operation

Digital services

Reduce maintenance costs and maximize system uptime with real-time data on infrastructure performance. Get actionable predictive maintenance information that protects your customers, safeguards your reputation and minimizes financial impact.

- Optimize energy efficiency and reduce energy-related costs

- Reduce downtime from network issues or equipment failure

- Improve predictive maintenance and reduce reactive maintenance issues

Field services

Site safety

- Reduce risks during operations
- Maximize site availability and utilization
- Reduce insurance costs

New installations

- Certify the reliability and safety of your equipment
- Fully understand your new installation
- Have a single point of contact during on-site work

Infrastructure maintenance

- Fast replacement of obsolete components with newer, more efficient equipment
- Enhance cybersecurity and safety
- Have access to the right parts at the right time

A network of certified innovators

Working with partners we trust is as important to us as it is to our customers. EcoXperts deliver innovative and sustainable solutions, through integrated technology and digitization, to our shared customers. Trained and certified by Schneider Electric, our ecosystem of EcoXpert partners provide best-in class services and digital solutions that will exceed your expectations.

EcoXpert™

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

Learn more

Discover EcoStruxure™

Learn more about EcoStruxure™ Power.

The connected university: A prestigious educator meets a top-class energy sensor.

Contact us to start your journey.

se.com/powertag

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