Design new building with improved electrical efficiency

“Monitor it, Secure it, Tag it”

Customer case

Sophia is in charge of designing an electrical network for a new building.

She is considering energy efficiency standards and regulations. To do so, she’s looking for solutions to:
- comply to new energy management standards and better understand the energy consumptions and waste,
- engage preventive maintenance,
- identify origin of trouble in case of network issues, and return to service faster to minimize downtime.

Moreover, she will select a system that is optimized in terms of impact (space, wiring, integration, scalability).

Our recommendation

Connect electrical switchboards with PowerTag System. Combine wireless devices together with one single point of aggregation to:
- monitor and measure electrical loads,
- be notified when needed thanks to alarming,
- help prevent electrical fire due to cable overheating inside panelboards,
- display instant values locally on switchboard,
- make data available to supervision system,
- push data to the cloud and benefit from Schneider Electric expertise thanks to EcoStruxure solutions.

Benefits

For Design Office:
• PowerTag System supports and contributes to energy efficiency programs and standards such as:
  – European Energy Efficiency Directive (EED),
  – IEC 60364-8-1 “Low Voltage Electrical installations Energy efficiency”,
  – EN 17267 “Energy Measurement and Monitoring plan”,
  – ISO 50001 "Energy Management System".
• Simple to integrate into supervision system including Schneider Electric EcoStruxure Solutions.

For Panel Builder:
• Reduced footprint in the switchboard.
• Less wiring thanks to wireless communication devices.
• Intuitive and simple commissioning through embedded web page and EcoStruxure Power Commission.

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Solution

Which wireless communication devices for digital electrical switchboards?

PowerTag Link is a gateway that collects the data wirelessly and push to local network. For cloud application, Com’X gateway is requested. PowerTag Display is an optional wireless local HMI.

PowerTag Energy sensors are space-saving, and accuracy class 1 sensors. They measure voltage, current, power and energy. They allow detection of voltage loss and overcurrent. The whole range covers ratings up to 2000 A.

Other connected products for monitoring features:
HeatTag is a smart sensor for early detection of overheating wire connections or overheating cables. It analyzes gas and particles in the air and sends alerts. Availability date: Q4 2020.
PowerTag Control: collects OF/SD status.

Important: Do not use HeatTag as a safety device. HeatTag does not replace the fire protection devices of the building.

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More about PowerTag System

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