Automation

zillion

The future of low-voltage networks depends on their capability for automation and remote operation. Automated low-voltage distribution panels enhance operational intelligence by incorporating electronic switches and digital communication.

These distribution panels allow for continuous monitoring of electrical parameters, condition-based predictive diagnostics, and remote-controlled switching operations. Their modular and open architecture is compatible with standard protocols such as Modbus, IEC 104, and MQTT, which facilitates interoperability with SCADA platforms and other energy management systems.

Additionally, built-in cybersecurity measures, self-diagnosis functions, and functional redundancy improve the overall resilience of the system.

Together, these advancements transform the low-voltage panels into an active node within an automated, scalable electrical infrastructure, ready to meet the demands of the smart grid.

04.1 Neulan: LV Automated Panels

neulan
LV Automated Panel

Neulan represents the next generation of low-voltage automation panels, combining advanced energy supervision with remote switching capabilities. These panels enable real-time monitoring and control of both incomer and outgoing lines, allowing operators to open or close circuits remotely without the need for field crew intervention.

Built for smarter, safer, and more efficient network operation, Neulan panels bring automation and intelligence directly to the low-voltage grid.

FUNCTIONALITIES AND CHARACTERISTICS

Remote operation of incomer and feeder circuits, avoiding on-site interventions.

Integration of protection, sensing, and communication in a single panel.

Advanced energy supervision with real-time electrical measurements.

Temperature monitoring on cable connections to prevent overheating.

Customisable protection curves and fault reclosing functions.

Embedded TSA and communication modules for data acquisition and control.

Modular architecture, compatible with SCADA and IT/OT platforms.

Enhanced safety through remote diagnostics and alarm management.

KEY USE CASE

Ideal for automating LV distribution networks where remote operation, safety, and reduced maintenance costs are priorities.

Particularly suited for urban and rural substations requiring fast fault recovery and continuous supervision.

Partially
automated LV panel

Completely
automated LV panel

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ALIVE AND SMART
GRIDS BY GORLAN

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