



INTEGRATED POWER AUTOMATION SOLUTION

Future-Ready Solutions for **Resilient Grids**

Utility and industrial power system operators struggle with integrating renewable energy, managing bidirectional flows, and maintaining cybersecurity across increasingly decentralized grids, resulting in project delays, engineering resource strain, and elevated operational risk that threatens grid resilience and reliability in mission-critical infrastructure.

Transforms challenges into opportunities with future-ready technologies.

SIEMENS

Siemens Power Automation Solutions

A secure, standardized, and future-ready solution for power systems. By integrating protection, control, automation, communications, cybersecurity, digital applications, and lifecycle services into a unified framework, it ensures seamless operation from grid-edge equipment to the control center. The Siemens Protection & Automation Suite unifies all automation layers into a single architecture, giving customers enhanced control and insights.

Process Level – The Digital Foundation

Components: Primary equipment, intelligent sensors, CTs/VTs, and advanced Merging Units for both conventional and LPIT/NCIT applications, all supported by robust IEC 61850 Process Bus communication.

Benefits: High-precision measurements, streamlined wiring with reduced complexity, and full compatibility for seamless digital substation implementation.

Field Level – Intelligent Protection & Control

Components: Industry-leading protection relays, precise bay controllers, fault and power quality recorders, and versatile Remote Terminal Units (RTUs).

Benefits: Fast and reliable fault clearance, optimized system operation, and standardized engineering processes that enhance efficiency.

Station Level – Secure Substation Automation

Components: Advanced Substation Automation System (SAS), intuitive Human-Machine Interfaces (HMI), continuous power quality monitoring, secure gateways, and integrated firewalls with comprehensive certificate management.

Benefits: Centralized and secure operational control with full IEC 61850-based interoperability for streamlined substation performance.



Control Center & Digital Layer – Ready for Digital Expansion

Components: SCADA systems and control center integration with optional connectivity to Siemens SI EA digital and IoT platform. Electrification X, enabling advanced functionalities including:

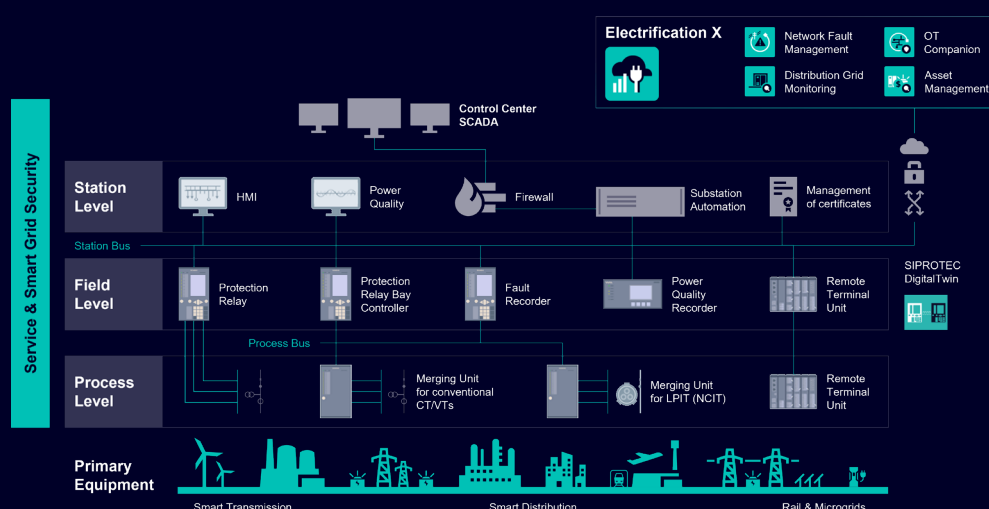
- Network fault management
- Distribution grid monitoring
- Asset management
- OT Companion
- SIPROTEC DigitalTwin

Benefits: Enhanced grid transparency, data-driven operations, and proactive maintenance capabilities to ensure a resilient and adaptive grid.

Integrated Cybersecurity & Services

Cybersecurity and service strategies span all layers as core features, not add-ons. A comprehensive defense-in-depth approach, aligned with global standards such as IEC 62443, ensures system resilience.

Benefits: Reduced cyber risks, adherence to regulatory standards, and long-term operational confidence in critical infrastructure.



Power Automation Solutions

A unified architecture simplifies projects, accelerates delivery, and ensures Siemens technologies' trusted reliability. Lifecycle management reduces costs, built-in cybersecurity meets global standards, and integration with Siemens Xcelerator and Electrification X supports scalable growth.

© Siemens 2026

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

Siemens AG

Smart Infrastructure
Electrification & Automation
Mozartstrasse 31c,
91052 Erlangen, Germany

Siemens Industry Inc.
3617 Parkway Lane
Peachtree Corners, GA 30092
United States