# Gain energy insight and control with PowerLogic™

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# PowerLogic SCADA

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power monitoring and control software





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# Control that reduces outages and increases operator efficiency

# Real-time, high speed response

PowerLogic SCADA v 7.1 software delivers a reliable, flexible and high performance monitoring and control solution designed to reduce outages and increase power efficiency. It is built to handle user requirements from the smallest to the most demanding enterprises, while still providing high time performance and reliability. Easy-to-use configuration tools and powerful features enable faster development and deployment of any size of application.

Object-based, standard graphics and symbols provide operators with an interactive and user-friendly interface. Intuitive commands and controls increase efficiency of operators to interact with the system interface. PowerLogic SCADA controls your system with high reliability, performance and data integrity through the use of advanced architectures, such as hot/warm redundant I/O device configurations, self-healing ring communications, and primary and standby server configurations. Comprehensive user-based security is integrated into all interface elements, ensuring a secure control system.

PowerLogic SCADA solutions are sold complete and ready to go, with all features, protocols and drivers included. As a single, comprehensive package, PowerLogic SCADA is tightly integrated and built to perform.

PowerLogic SCADA can help your power-critical enterprise benefit from high performance power monitoring and control, reducing power outages and increasing overall productivity.

We have the ideal solution for industrial building applications including:

- Data centres
- Oil & Gas
- Airports
- Water treatment
- Automotive
- Mining Metal Minerals
- Health Care
- MV/LV substation
- Local automation

# **Typical applications**

Network protection and control

Operate distribution network safely and reliably □ Improve continuity of electrical service

□ Energy availability and reliability Verify the reliable operation of equipment

□ Support proactive maintenance to prolong asset life

## **Key features**

- □ Real-time control and monitoring of electrical distribution equipment through network IEDs.
- Dynamic user interface that blends control and animated display for greater control and higher operator efficiency in both normal and critical scenarios.
- □ Analysis that combines alarm and trend data to help isolate and identify faults, reducing the amount of downtime.
- On-board and PC-based alarms and events, time-stamped to millisecond precision to help determine cause and effect relationships.
- Events logging: real-time / historical trending, waveform captures.
- □ True software architecture redundancy: data quality assurance, historical data, web technology.
- □ True network and communication redundancy: An open solution easily integrated into new or existing networks.
- □ Third party device integration.
- Easy-to-use configuration tools that reduce development and deployment costs: Profile Editor for project creation, Profile Wizard for SCADA database generation.
- □ Scalable, upgradable and designed to grow as conditions and requirements change.
- □ Support services for the duration of the installation: compliance with time performance, cost control and modularity requirements.

### Schneider Electric services

Schneider Electric solutions are designed to provide business-aligned results for a measurable return on business investment:

- "Turnkey" services for migration of applications to PowerLogic SCADA 7.1, proposed by Schneider Electric experts and tailored to customer facilities.
- Minimise and manage control time interruption.
- PowerLogic SCADA systems are fully supported through the product lifecycle. Pro-active facility assistance is available for maintenance teams for sensitive electrical distribution maintenance operations.



Typical applications of PowerLogic SCADA



PowerLogic SCADA offers complete redundancy for: communications, networks servers, alarming, trending, and data synchronisation.

### Comprehensive Redundancy

- Communication network uses data path redundancy to eliminate chances of dropped or lost communications:
  - □ Self-healing rings + multiple-ring support
  - Network level protocol: Ethernet
  - Device level protocol: Modbus (Modbus TCP/IP)
  - Device level protocol: NTP support for time synchronization
  - Device level protocol: SNMP for switches, printers, and UPS

### Database hosting:

- Distributed architecture for I/O servers with corresponding configuration tools, IEC61850 data model
- □ Multiple server architecture
- □ Warm/standby redundancy

### IEDs:

□ Modbus RS485-connected via Ethernet network switch or direct on Ethernet

# A complete monitoring and control solution for electrical distribution networks

### Solution components

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- PowerLogic SCADA software
- □ All drivers, libraries, configuration tools
- □ Communication hardware products (gateways, PLCs, RTUs, switches, etc.)
- □ Design reference guide (architectures)
- □ Schneider services support

### Data integration

- □ Integrate with PLCs, RTUs, Controllers and other intelligent energy devices.
- PM800 series meters and PowerLogic BCPM/BCM42
- □ Integrate any PLC or other device via Modbus protocol
- □ Interface with other energy management or automation systems

### Main characteristics

- □ Accurate, 1 ms time resolution support
- □ Reliable system operation
- □ Control of a complete electrical distribution system +2000 devices and +200k tags

# **Control and coordinate**

Designed for operators, PowerLogic SCADA delivers complete control and monitoring capabilities:

- Automatic or user control of electrical distribution equipment within the power network
- □ View any screen and read and write any variable controlled through the SCADA system
- De Monitor real-time power and energy data, alarm, event conditions, equipment status (on/off, temperature) and control interface
- □ Customise graphics for alarms, status indicators, control triggers, and facility views







□ Native support for all Schneider Electric Sepam series 40 relays, Micrologic 5.0P and 6.0P, PowerLogic CM4000 series,



Real-time, high performance display and control of the power network. Point-and-click to reveal deeper layers of detail.

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# **Electrical distribution**

- □ Single line diagrams with real-time monitoring and control of devices, objects and distribution points. Point-and-click navigation reveals deeper layers of detail.
- □ Industry-standard symbols and templates that are fully animated and interactive, to blend control and display functionality.
- Dynamic colouring is easily configured using the default set or user-defined colours.
- □ True color, easy-to-use human machine interface (HMI) that provides operators with intuitive and consistent screens.



Plot different parameters against multiple axes to reveal trends or potentially dangerous conditions.

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High speed, 1ms alarm response with five most recent alarms on every page. Organise, filter by any alarm property.

# Alarms and events

- Easily discriminate between alarm criticality levels
- □ High speed alarm response. Capture and log every single alarm or event.
- □ Organise, filter and print by any alarm property. Configure specific alarm occurrences to change symbol color or flash an icon on a page.
- □ View the five most recent alarms from every page, providing detailed information in easy-tounderstand formats.
- Event log for all PC-based and on-board field events, alarms.
- Easily configure to annunciate based on alarm type.



Advanced configuration functions help support faster network commissioning, validation of system components, and database configuration.

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# Analysis

- □ Trend and analyse on any measured parameter, allowing operators to recognize patterns that may lead to disturbances.
- Displays millisecond-accurate historical alarms and trends to help determine the sequence of events or root cause analysis.
- □ Unites trend and alarm data for sophisticated disturbance views and analysis.
- □ User-defined colour coding and overlays to clearly highlight data series, time ranges, thresholds and limits.
- □ View waveforms via ActiveX tool. Record, save or export trends to archives.

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# **Configuration tools**

- □ Designed to help make project set up and network configuration fast and easy.
- Profile Editor provides standard device types and their associated profiles and allows engineers to easily customise the profiles of the devices specific to the project.
- □ Standardized tags per device profile (configurable), XML file.
- □ Creates, adds, edits device types, tags and profiles.
- Profile Wizard provides a standard interface for quick SCADA data base generation:
- □ Instantiation of devices, on a per object basis.
- Creates tags, trends, alarms and events when devices are added to system.
- □ Batch editing supported by automation interface.



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# Supported devices

- □ Sepam series 40
- □ Micrologic 5.0P
- □ Micrologic 6.0P

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- □ PowerLogic PM800 series
- □ PowerLogic BCPM/BCM42
- DeverLogic CM4000 series
- □ Any PLC or other device via Modbus protocol

# System requirements

Runs on standard PCs or servers and supports the following operating systems: Undows 2003 Server (32 bit)

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- □ Windows XP Professional (32 bit)
- Windows Vista Business

outages and increase your energy efficiency with PowerLogic SCADA, contact your local sales representative for ordering information.

To learn more about how you can reduce

Visit www.powerlogic.com for more information on other PowerLogic products, applications and system solutions.

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