

Spectrum Power™ ADMS

Intelligent, reliable, and flexible control center technology

ADMS is the catalyst that can transform massive utility data into actionable information for efficient operation of the grid

Integrated 3-in-1, modular system
Spectrum Power™ ADMS (Advanced Distribution Management System) combines SCADA (supervisory control and data acquisition), outage management, and fault and network analysis functions on a single software platform within a common user environment.

Whether all three functions are needed or just one, Siemens' platform will seamlessly integrate with existing control systems and applications while simplifying work processes and facilitating efficient data management.

Siemens ADMS enables network operators to reliably control and monitor their distribution network by providing increased situational awareness and response capabilities. It tracks and restores outages, manages maintenance and repair efficiently, and optimizes network decisions based on economic and network constraints.

Improved reliability, efficiency and optimization

- **Reliability** – Avoid unplanned outages and react quickly and efficiently to disturbances or potential problems. Satisfy regulatory mandates and improve customer satisfaction with real-time information and faster outage restoration.
- **Efficiency** – Reduce lost revenue and improve worker efficiency by minimizing the number of unnecessary truck rolls through faster communication and more precise network information.
- **Optimization** – Intelligently optimize all resources on the grid given economic and network constraints. Manage the growing complexity of Distributed Energy Resources (DERs) on the network. Incorporate integrated Transmission and Distribution planning into daily operations.



Figure 1: ADMS Heads-Up Display (HUD)

Valuable ADMS Use Cases

Siemens Spectrum Power™ ADMS is designed to meet the following operational challenges:

Prepare and respond to unplanned outages

- Improve reliability through faster restoration
- Improve customer satisfaction through communication
- Leverage mobile technologies to enhance organizational efficiencies

Coordinate switch execution for asset maintenance

- Enhance efficient operational processes (safety, internal communications, etc.)
- Increase customer satisfaction through seamless grid management
- Maintain a safe and reliable grid

Optimize network reconfiguration for load balancing

- Maintain a safe and reliable grid
- Ensure network stability while switching
- Increase network behavior predictability

Increase efficiency through reduced network losses

- Reduce power costs
- Maintain power quality

Enable self-healing grid

- Improve reliability through faster restoration
- Increase operator efficiency through automation
- Promote integration with condition monitoring for asset usage reporting and asset secure state retrieval

Intelligently manage DERs on the grid

- Enable prosumer DER adoption
- Increase visibility and management of DERs on the grid
- Integrate DERs into control center operations
- Enable comprehensive DER management through integration of utility-wide systems and processes

Efficient data engineering

- Improve operations efficiency through data management
- Increase visibility through online activation of new system data

Increase business process integration

- Enable CIM-based SOA integration with other systems (e.g. customer information system [CIS], MDM/AMI)
- Utilize your Geographic information system (GIS) as the distribution network definition source master

Transforming data into information you can use

Spectrum Power™ ADMS enables operation of all functions via a Web-based UI while using a common operational network data model.

SCADA functions are improved by advanced topologic coloring and extended tracing, online-editable Temporary Network Elements, easy Switching Procedure Management, and flexible Load Shedding – giving you complete visibility of and control over your network.

Configurable to meet your requirements

ADMS is typically provided as a full-scope solution, however it is also available:

- Integrated with a third-party OMS
- Integrated with a third-party SCADA

As an integral part of ADMS, enterprise integration with external systems, such as GIS, CIS, interactive voice response (IVR), advanced metering, workforce management and asset management systems are commonly included in these implementations via the CIM-based SOA integration framework.

With its component-based architecture and common UI, Spectrum Power™ ADMS provides a flexible, configurable environment for advanced grid management

Siemens Industry, Inc.
10900 Wayzata Boulevard, Suite 400
Minnetonka, MN 55305
1-800-347-6659
smartgrid.energy@siemens.com

Subject to change without prior notice.
All rights reserved
Printed in the USA
©2017 Siemens Industry, Inc.

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.