



The unlimited power of APOGEE®

Technology for today and tomorrow. Seamless  
integration with standard protocols:  
BACnet™ – LonTalk® – Modbus® – OPC™

[www.usa.siemens.com/apogee](http://www.usa.siemens.com/apogee)

**SIEMENS**

# A more powerful, unified building automation system

It starts with our industry-leading building management system, APOGEE®

When you integrate with APOGEE, you're leveraging your investment in a single system interface with unlimited power. As the backbone of any integration plan, APOGEE helps manage costs and improve performance throughout the entire integrated network. The results? A high-performing, energy-efficient building; a more productive and better-informed staff; a faster return on investment. It's a comprehensive, customized solution that enables you to build upon past investments, meet today's needs, and always be ready for the future.

**APOGEE® Wireless:** Enables building automation devices to communicate wirelessly in such instances as room or zone controllers and associated room temperature sensors, variable frequency drives, electrical meters, and point modules. Wireless mesh technology creates a reliable self-forming, self-healing network virtually transparent to the system and end-user, no matter the environment.

**APOGEE GO™ Web Access:** Allows operations staff to access the system from anywhere. By combining APOGEE GO with standard protocol integration solutions, a building automation professional can monitor a huge variety of equipment types through one Web site connection.

**InfoCenter Suite® Data Archiving and Reporting:** This data tracking and management tool is the most powerful historian option in the building automation industry.

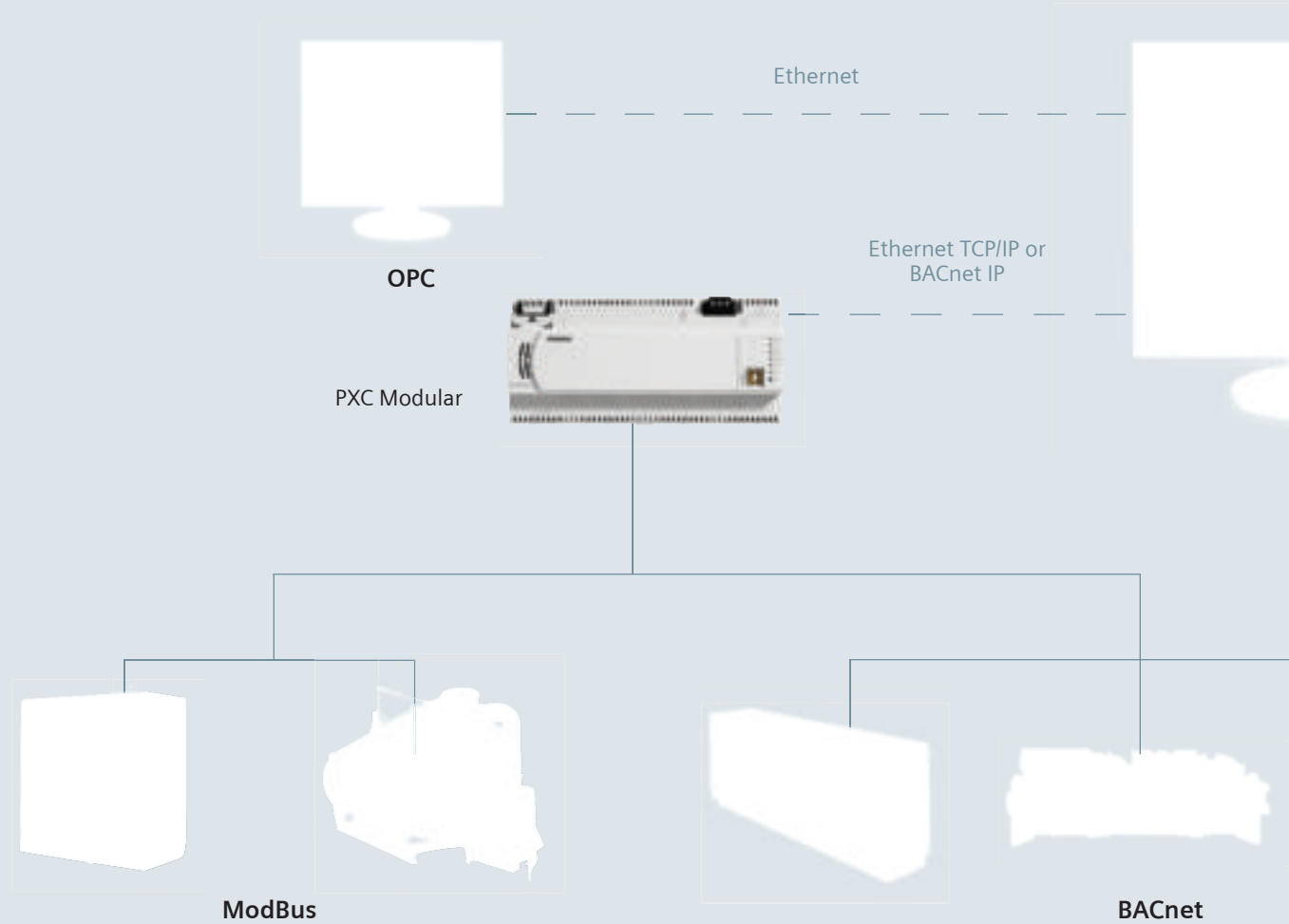
**Insight® Advanced Workstation:** Provides a graphical approach to manage and control a building from an easy-to-use interface. This provides for facility-wide efficiencies, as well as cost-effective operation and information sharing.

**Alarm Issue Management:** Manage the life cycle of an alarm issue through all stages, from initiation to resolution

**Life Safety:** UL-Listed as a primary annunciator for fire. Take full control of the fire alarm system, including acknowledgement, silence and reset (remote notification and Web access also available). Manage critical fire, security and automation events through a common interface. Schedule historical, diagnostic and detector sensitivity reports

**Remote Notification (RENO):** Get alarm and system event information from your mobile phone, pager, email and more. Provides escalation capabilities to ensure response to critical events.

# Limitless integration options with ALL standard, widely used protocols



## OPC

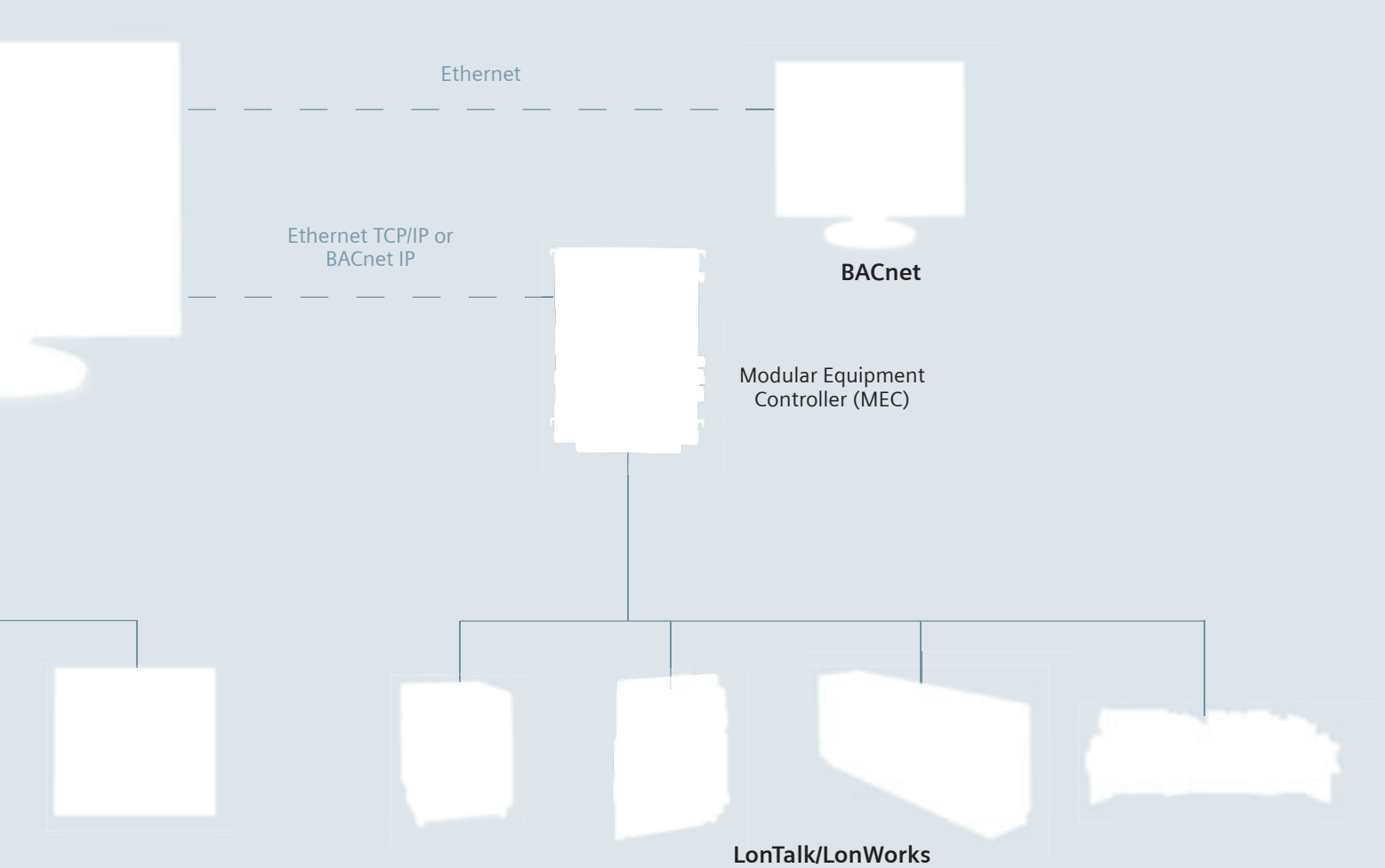
OPC (OLE for Process Control) is based on the Microsoft COM (Component Object Model) and OLE (Object Linking and Embedding) software architectures. OPC uses standard software technology including Microsoft ActiveX, COM, DCOM, and Microsoft Windows.

- Supports OPC Data Access 2.0, Data Access 1.0a, and Alarms and Events 1.0.
- Commands current values of OPC items, set point changes, and equipment control values.
- Insight includes graphics for a wide range of OPC-integrated devices.
- APOGEE transforms building control information into OPC items that may be viewed and commanded from other applications.

## Modbus

Developed for exchange of data between PLCs, Modbus is publicly available and relatively simple, so it has been adopted by thousands of companies, particularly in commercial and industrial controls. As manufacturers may implement the Modbus protocol in many different ways, integration to some products or systems requires professional configuration.

- Supports the RTU and TCP versions of Modbus.
- Monitors and commands hundreds of industry-leading Modbus-compatible devices and systems.
- Allows Modbus systems to read and write APOGEE data values.
- APOGEE brings the most sophisticated set of Modbus integration solutions.



## BACnet

BACnet is a standard protocol originated and supported by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and accepted as an ASHRAE and ANSI standard for the HVAC control industry. In the application layer, BACnet defines a device, objects within a device, properties of the objects, and services which act upon an object or property.

- Supports BACnet Ethernet, BACnet IP, and BACnet MS/TP.
- Monitors and controls BACnet objects, with read and write properties, alarm and event notification, and alarm acknowledgement.
- Discovers third-party BACnet devices and systems on a network and develops object lists.
- Integrates HVAC equipment including chillers, boilers, air handling units, and more.
- Enables powerful Insight programming, scheduling, alarming, trending and graphical control of BACnet devices.

## LonTalk and LONWORKS

LW technology, created by Echelon Corp, is implemented through a Neuron IC microcontroller. The LonTalk protocol underpins device and system communication. The LM Interoperability Association oversees aspects of device communication through the creation of device profiles. As peers on a network, LM devices may interoperate and contain portions of a control sequence. Professional configuration of devices may be required in many applications.

- Supports LONWORKS® networks and LONMARK®-compliant devices.
- Supports LONWORKS network variable types.
- Integrates LONMARK-compliant devices for alarming, trending, scheduling, customized programming, and more, in Insight.

The APOGEE® Building Automation System delivers powerful integration solutions for ALL widely used standard communication protocols. These include BACnet™, LonTalk®, Modbus®, and OPC™. What's more, thanks to Siemens' innovation, your facility management system of today remains ready for the emerging technologies of tomorrow.





### Improving Lives, Creating Value, Shaping the Industry

As a leading provider of building control, energy management, fire safety and security system solutions, Siemens Building Technologies, Inc., improves facilities by making them comfortable, safe, secure and less costly to operate.

Our expertise in integration planning and implementation has been proven in more than 4000 installations. Through our advances, facility performance has become an important asset to businesses and institutions. We continue to take a leading role in shaping our industry.

**Contact Siemens Building Technologies to find out more about APOGEE integration to standard protocols including BACnet, LonTalk, Modbus, and OPC.**

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