

Open, Intelligent  
Building Control Solutions

## SymmetrE™



**EXCEL**5000 OPEN™  
SYSTEM





Honeywell SymmetrE™ Building Management System  
Simply, the most advanced solution to control your building

Symm

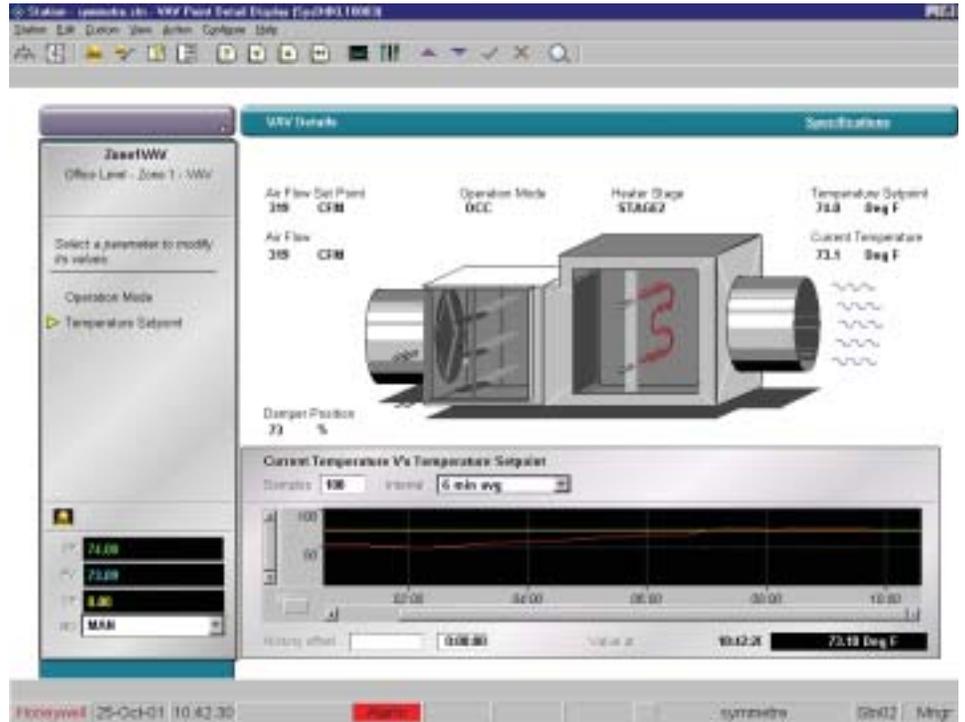
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## Finally, a building management system that works for you.

The Honeywell SymmetrE™ building management system redefines what to expect from monitoring and control of your heating, ventilation and air conditioning equipment. The scalable, open SymmetrE™ system brings your building's occupant needs, operational issues and budget pressures into perfect balance. You get an unparalleled solution that helps simplify facility management, boost productivity and reduce costs.

An intelligent workstation SymmetrE™ delivers an intelligent workstation with the full suite of tools you and your staff need. You can view and control subsystems, access and analyze data, manage equipment maintenance, see Intranet and Internet pages and generate graphs, charts and reports directly from your desktop.

A *really* open architecture  
You also benefit from a building management system that's truly open. SymmetrE™'s unique technology takes full advantage of leading open standards, permitting you to create an integrated system with transparent communications from third-party subsystems directly to SymmetrE™. There's no need for gateways, simplifying configuration, installation and maintenance. SymmetrE™ also permits you to control many more points, while enabling you to access the full data-gathering capabilities of your controllers at your desk.



**SymmetrE™ features a powerful graphical user interface for maximum productivity.**

Advanced information access and analysis  
SymmetrE™ goes a quantum leap beyond traditional control by delivering cutting-edge data management applications. Its software helps you translate raw data into clear insights to help maximize facility performance and enhance your bottom line. SymmetrE™ provides:

- Data collection in intervals from one second to one day
- Standard and customized reports
- Historical records of all event information and operator actions
- Access to Internet and Intranet information without leaving the display
- Trending capabilities
- Ability to retrieve and analyze archived data

The bottom line: The Honeywell SymmetrE™ system helps you do more with fewer resources. It provides a powerful new way to optimize your operations and reduce your operating costs.

# SymmetrE™

## The industry's most open, flexible architecture

The Honeywell SymmetrE™ system's cutting-edge architecture supports leading open industry standards, including:

- LonMark®, which supports LonWorks®, a network of interoperable devices from multiple vendors
- BACnet, the ASHRAE standard for implementing both BACnet client and BACnet server functionality
- Modbus, the defacto standard communications protocol for interfacing to different controller types
- OPC, which supports OLE (Object Linking and Embedding), which bridges between Windows-based applications and process control hardware
- AdvanceDDE, the standard for data exchange among a wide range of third-party servers
- ODBC, an industry standard for database access

The solution also supports Honeywell's popular EXCEL 5000® line of controllers.

SymmetrE™ communicates seamlessly with third-party controllers, devices and communications interfaces without the need for gateways, giving you maximum flexibility. The system also functions as a data server, using open protocols to make controller information available to other management systems.

Configuration options that meet your needs

SymmetrE™ scales easily to provide state-of-the-art control whether you manage several facilities or serve multiple tenants at one site.

Its cost-effective client-server architecture permits configurations ranging from a single workstation to an extended system with multiple SymmetrE™ workstations and a server connected across a LAN, WAN, Intranet or the Internet. Using standard TCP/IP network protocols, SymmetrE™ also allows communications to other Intranet/Internet systems and PC networks.

Simple, convenient access and use

SymmetrE™ joins its flexible architecture with features and functionality for maximum data access and ease of use. Just point and click to go directly to detailed buildings information, without the need for custom buttons or complex navigation paths.

Operators aren't the only ones to benefit from SymmetrE™'s user-friendly features. The system also provides tenant control options via a Web browser or telephone. So you can give occupants the convenience of making simple changes, such as adjusting the setpoint or turning the lighting or air conditioning system on, while maintaining the integrity of your facility management operation.



Remote Site  
BACnet



Operator Workstation  
LAN/WAN



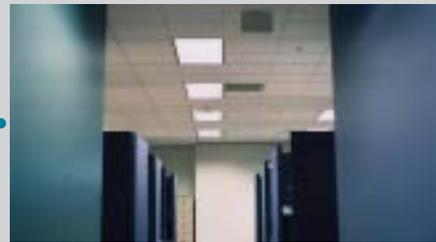
Air Handling Units  
EXCEL 5000® Open



Chiller Plant  
BACnet



Zone Control  
LonMark®



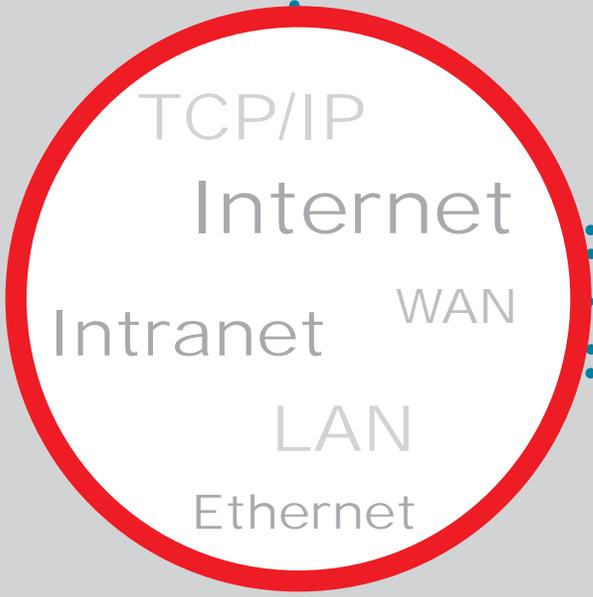
Lighting  
LonMark



Electrical Meters  
Modbus/OPC/LonMark



Tenant Control Option  
Web Browser/Telephone

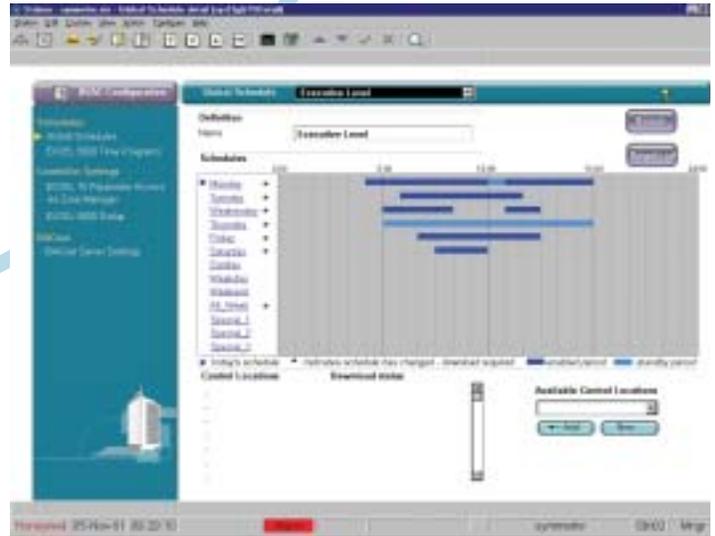


SymmetrE™ Data Server

## Comprehensive control at your fingertips



SymmetrE™ seamlessly integrates your equipments' myriad data streams for analysis and reporting.



SymmetrE™ helps save time by allowing an operator to manage HVAC and lighting systems from a single screen.

### Simplified alarm handling

The Honeywell SymmetrE™ system delivers the industry's best technology for prompt, effective HVAC alarm management. You can define what constitutes an alarm and determine its priority. The alarm summary page permits sorting and filtering of all alarms by priority, area or acknowledged status.

When an abnormal building event occurs, operators are notified immediately via audible alarms and a dedicated alarm line on every SymmetrE™ screen. The Alarm Pager option allows alarms to be routed to pagers and cell phones, providing immediate notification wherever your staff might be.

### Powerful historian

SymmetrE™'s history and trending capabilities give you the data to troubleshoot potential problems and analyze equipment performance. SymmetrE™ collects point data on both a "snapshot" and "average" basis, permitting you to view what was happening in your system at a given point or over a defined period.

Additionally, SymmetrE™ is the only system that allows you to simultaneously collect data on the entire system, not just a few points at a time. You can use the data in reports and application programs, or even cut and paste the information directly into Microsoft® Excel.

Convenient global scheduling  
Equipment scheduling is quick and convenient with SymmetrE™. The system permits the operator to schedule and manage all HVAC and lighting subsystems from the workstation, using a variety of schedule options and customized choices.

Automated maintenance management  
SymmetrE™'s Integrated Maintenance Management (IMM) facility helps you proactively address equipment needs, reduce costly downtime and track maintenance histories. IMM tracks individual field device data such as duty cycles, run hours and high limit data values, then generates a work order for a piece of equipment when it meets certain defined conditions. You can create standard or customized maintenance reports for convenient, centralized tracking.



Using a Web browser, SymmetrE™'s integrated maintenance application provides a single, efficient tool to identify equipment maintenance needs, schedule service, track work orders and review repair records.

## Information and insights for better decisions

In the past, building management systems have focused on helping you control and monitor equipment. The SymmetrE™ system goes beyond, giving you the intelligence to better serve both occupants and management, identify optimization opportunities and proactively control and improve costs.

**Broad reporting capabilities**  
With SymmetrE™ there's no need for additional software tools to track and report your facilities' key parameters. The workstation's advanced software provides both standard and customized reporting capabilities, making it easy to analyze your data in a variety of ways and formats. Among other functions, SymmetrE™ permits you to:

- Make trend comparisons using both current and historical data
- Benchmark the performance of several facilities
- Analyze equipment operation across seasons
- Generate energy usage reports
- Develop cost-of-operation spreadsheets
- Integrate building operations data into financial plans and management reports

View Web information on the custom display  
Honeywell's SafeBrowse™ technology allows the operator to access Intranet and Internet pages and systems directly from the SymmetrE™ workstation. Whether you need the current weather forecast, a sequence of operating instructions or a manufacturer's specification sheets, SymmetrE™ brings the power of the Internet directly to the operator.



SymmetrE™ allows operators to access Intranet and Internet information without missing any HVAC activity.

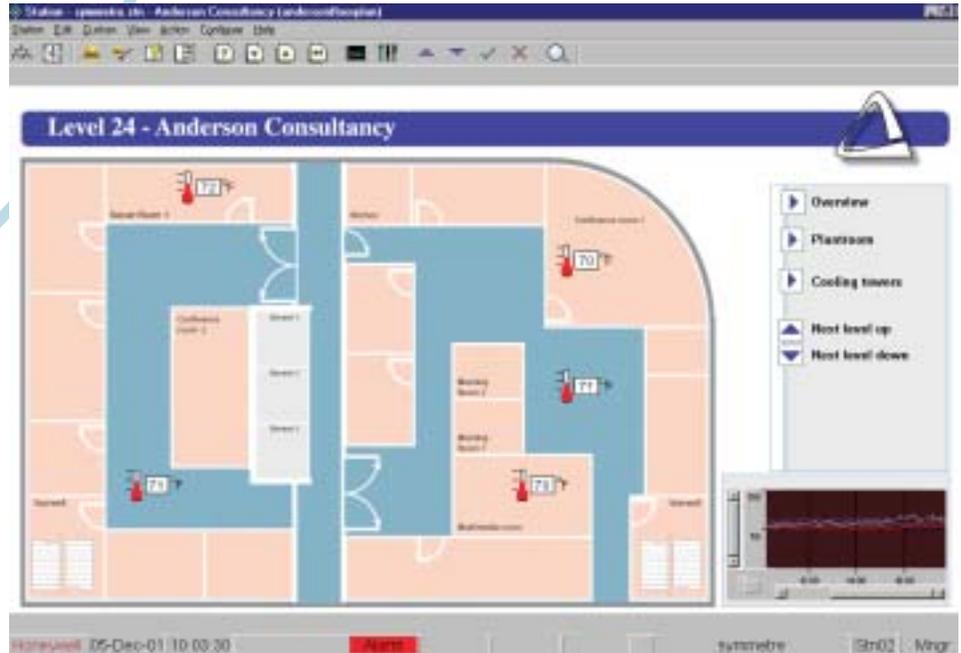
# SymmetrE™

# Honeywell SymmetrE™ Building Management System

The Honeywell SymmetrE™ system is a complete solution for building management. It can integrate with and provide onsite and remote monitoring of HVAC subsystems, energy-use monitoring systems and industrial-grade controllers. The system also integrates with Web, Internet and Intranet pages and systems.

An open, flexible architecture Honeywell SymmetrE™ uses industry-standard open protocols and PC components and software applications to create a uniquely powerful yet cost-effective system. The system uses the Microsoft® Windows® 2000 Professional Operating System on Intel standard PC hardware. The architecture consists of a single-server, multiple-client application. It can be scaled to support needs from a small commercial building with a few packaged rooftop units, to a solution capable of integrating a university campus into one operational system. Other SymmetrE™ elements and features include:

- Ability to support industry-standard open protocols, including LonWorks®, BACnet, OPC, AdvanceDDE, Modbus and ODBC database access
- Industry-standard TCP/IP networking over Ethernet
- Controllers may be connected to local Ethernet LAN; remote connections via WAN
- Integrates HVAC data with such non-traditional data as weather forecasts, operating procedures and manufacturer specifications, giving the operator a complete view and increasing their productivity



SymmetrE™ provides simple, convenient access. Just point and click to go directly to detailed building information.

## Key System Information

### Database Size:

SymmetrE™ database size

Size	Points
<input type="checkbox"/> 1	500
<input type="checkbox"/> 2	2,000
<input type="checkbox"/> 3	5,000
<input type="checkbox"/> 4	10,000
<input type="checkbox"/> 5	20,000

Up to five simultaneous operator workstation connections are available.

### Optional Software:

- LonWorks Interface
- BACnet Client & Server Interface
- Advanced DDE
- OPC Client & Server
- Modbus
- Tenant Phone Control
- Integrated Maintenance Manager (IMM)

SymmetrE™ is a trademark of Honeywell Inc.  
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Pentium® is a registered trademark of Intel® Corporation

**Honeywell**

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