Building Automation Systems Catalog

Workstations, Controllers and Accessories

Honeywell
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The Excel CARE and Live CARE software packages are graphic tools to easily and quickly create and simulate application programs that run controllers in EXCEL 5000® Systems. Users can perform these functions without extensive knowledge of a programming language. Users systematically select control system graphic elements such as lighting and heating, ventilating, and air conditioning (HVAC) equipment and create control sequences in a Microsoft® Windows® environment. CARE software validates as the designer works, thus keeping the process free of errors. Work is completed quickly and efficiently. As part of the design process, CARE automatically creates comprehensive documentation and materials listings.

NOTE: All CARE products require a signed SOFTWARE LICENSE AGREEMENT prior to purchase. Ordering CARE via this website does not guarantee that you are approved for the purchase. Honeywell reserves the right to refuse shipment, if appropriate.

SymmetrE Workstation

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.

NOTE: All CARE products require a signed SymmetrE™ LICENSE AGREEMENT prior to purchase. Ordering SymmetrE™ via this website does not guarantee that you are approved for the purchase. Honeywell reserves the right to refuse shipment, if appropriate.

The Honeywell SymmetrE™ PC workstation redefines what to expect from monitoring and controlling your building management system. The scalable, open SymmetrE™ software 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.

NOTE: All SymmetrE™ products require a signed SymmetrE™ LICENSE AGREEMENT prior to purchase. Ordering SymmetrE™ via this website does not guarantee that you are approved for the purchase. Honeywell reserves the right to refuse shipment, if appropriate.

SymmetrE™ is a highly configurable PC workstation providing an efficient and reliable way of ensuring the comfort of people and the effective operation of buildings and facilities. Used with the Excel 5000 Building Management System it provides a complete solution to access information and the control needs of one or more buildings.

SymmetrE™ integrates using Open System Standards and Internet and Intranet applications. This allows you to choose the best field solutions for your building and to integrate information into SymmetrE™ seamlessly for further processing, reporting and distribution. SymmetrE™ provides operators, supervisors, and managers with a sophisticated web-style operator interface to enable personnel to easily monitor and control buildings at one or more sites. The SymmetrE™ Server runs on the multi-user, multi-tasking, industry standard

Application: Tool
Application Size: Small to Large
Building Management Interface: EBI, SymmetrE; XBS
Network Communications: C-Bus; LonWorks Bus
Commissioning Software: CARE
Used With: Excel 5000
Compatible with: Excel 5000 System Controllers

Excel 5000

Controller Tools

Excel 5000 System Controllers

Product Number Description Output Type Includes
CARE-80-LNS CARE: Graphic Programming Tool Graphical Interface USB Drive with full installation of CARE 8 with voucher number
PROTPUG-UP CARE: Graphic Programming Tool Upgrade Graphical Interface USB Drive with CARE 8 upgrade

SymmetrE Starter-CD310; includes a 250 point DB, Excel 5000 Direct Interface, LonWorks interface, 1 Station, 4 Station Browsers, Quick Builder, Display Builder, MS Excel Exchange, Network Server, and WEB Toolkit
Expansion Pack - 250 to 500 point DB
Expansion pack - 500 to 1000 Point DB
Expansion pack - 1000 to 2000 Point DB
Expansion pack - 2000 to 3500 Point DB
Expansion pack - 3500 to 5000 Point DB
Expansion pack - 5000 to 7500 Point DB
Expansion Pack - 7500 to 10,000 point DB
Expansion Pack - 10,000 to 15,000 point DB

• Password security
• Mathematical editor
• Switching logic
• Time function
• Control strategy
• Standard library
• Documentation
• Control program simulation
• Applicable to EXCEL 5000 System controllers
• Point-and-click programming
• Schematic drawing
• Switching logic
• Time function
• Mathematical editor
• Standard library
• Documentation
• Control program simulation
• Applicable to EXCEL 5000 System controllers
• Password security

Application: Tool
Application Size: Small to Large
Building Management Interface: EBI, SymmetrE; XBS
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Used With: Excel 5000
Compatible with: Excel 5000 System Controllers
<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM-DB15K-20K-EXP</td>
<td>Expansion Pack - 15,000 to 20,000 point DB</td>
</tr>
<tr>
<td>SYM-DB0500-UPG</td>
<td>Software version upgrade with 500 point DB</td>
</tr>
<tr>
<td>SYM-DB1000-UPG</td>
<td>Software version upgrade with 1000 point DB</td>
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<tr>
<td>SYM-DB2000-UPG</td>
<td>Software version upgrade with 2000 point DB</td>
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<tr>
<td>SYM-DB3500-UPG</td>
<td>Software version upgrade with 3500 point DB</td>
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<tr>
<td>SYM-DB5000-UPG</td>
<td>Software version upgrade with 5000 point DB</td>
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<tr>
<td>SYM-DB7500-UPG</td>
<td>Software version upgrade with 7500 point DB</td>
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<tr>
<td>SYM-DB10K-UPG</td>
<td>Software version upgrade with 10,000 point DB</td>
</tr>
<tr>
<td>SYM-DB15K-UPG</td>
<td>Software version upgrade with 15,000 point DB</td>
</tr>
<tr>
<td>SYM-DB20K-UPG</td>
<td>Software version upgrade with 20,000 point DB</td>
</tr>
<tr>
<td>SYM-DB20KUPG</td>
<td>Software version upgrade with 20,000 point DB</td>
</tr>
<tr>
<td>SYM-STB-UP-STN</td>
<td>Upgrade Browser client to full station client, R310 ONLY</td>
</tr>
<tr>
<td>SYM-OP-LNS</td>
<td>LNS Server</td>
</tr>
<tr>
<td>SYM-OP-LNSUPG</td>
<td>LNS Database Upgrade for systems with existing LNS Database</td>
</tr>
<tr>
<td>SYM-IF-BACNET</td>
<td>BACnet Client (R200 and later)</td>
</tr>
<tr>
<td>SYM-OP-BACSERV</td>
<td>BACnet Server (R200 and later)</td>
</tr>
<tr>
<td>SYM-IF-MODBUS</td>
<td>Modbus Interface</td>
</tr>
<tr>
<td>SYM-IF-OPCCL</td>
<td>OPC Client Interface</td>
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<tr>
<td>SYM-IF-ADVDECL</td>
<td>Advance DDE Interface</td>
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<td>SYM-NW-OPCSERV</td>
<td>OPC Server</td>
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<tr>
<td>SYM-IF-XL5DIRDIAL</td>
<td>EXCEL 5000 Dial-up</td>
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<tr>
<td>SYM-OP-ALMPAG</td>
<td>Alarm Pager</td>
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<tr>
<td>SYM-OP-IMM</td>
<td>Integrated Maintenance Manager</td>
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<tr>
<td>SYM-OP-WEBPCTL</td>
<td>Web Point Control</td>
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<tr>
<td>SYM-OP-DTXL</td>
<td>OPC Data Transfer - Local</td>
</tr>
<tr>
<td>SYM-MEDIA</td>
<td>Additional Copy of SYMMETRE CDs</td>
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</tbody>
</table>
Excel 800 Controller

With more power and fewer pieces to buy, the new Excel 800 Controller is the plant controller you can count on for years to come. Along with easy programming and extensive memory, it offers all the flexibility you've come to depend on from the Honeywell Excel 5000 product line. Best of all, you won't have to learn any new programming, because your old Excel 500 application programs work perfectly with the Excel 800 controller.

- Double The Memory
- Reduced training needs, use your current Excel 500 application programs
- Hot-swappable replacement of defective I/O modules
- Easy-Access Terminals
- Simplified Installation

Building Management Interface: EBI; SymmetrE; ACSELON
Commissioning Software: CARE 8
Voltage: 24 Vac/dc, ± 20%
Frequency: 50 Hz; 60 Hz
Operating Humidity Range (% RH): 5 to 93% RH, non-condensing
Shipping Temperature Range: -4 F to +158 F (-20 C to +70 C)

CPU Modules
Application: Freely Programmable; Boiler; Discharge Air; Cooling Tower; Chiller; Hydronic; Built-up AHU
Network Communications: C-Bus; LonWorks Bus
Power Consumption: Max 5 VA (max. 4 W)
Description: Excel 800 Control System

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Output Type</th>
<th>Used With</th>
<th>Approvals: Underwriters Laboratories, Inc.</th>
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<tbody>
<tr>
<td>XCLR8010A</td>
<td>Analog/Modulating; Pulse Width Modulation; Floating; Staged On/Off</td>
<td>XL800</td>
<td>UL 916</td>
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<tr>
<td>XCLR8010AU</td>
<td>Analog/Modulating; Pulse Width Modulation; Floating; Staged On/Off</td>
<td>XL800</td>
<td>UL916 and UL864</td>
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</table>

Input/Output Modules
Used With: Excel 800 Controller

<table>
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<tr>
<th>Product Number</th>
<th>Description</th>
<th>Application</th>
<th>Network Communications</th>
<th>I/O Count</th>
<th>Comments</th>
<th>Approvals: Underwriters Laboratories, Inc.</th>
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<tbody>
<tr>
<td>XF821A</td>
<td>Analog Input Module</td>
<td>Input Module</td>
<td>Panel Bus</td>
<td>8 analog input module (Panel)</td>
<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XF821AU</td>
<td>Analog Input Module</td>
<td>Input Module</td>
<td>Panel Bus</td>
<td>8 analog input module (Panel)</td>
<td>—</td>
<td>UL916 and UL864</td>
</tr>
<tr>
<td>XF822A</td>
<td>Analog Output Module</td>
<td>Output Module</td>
<td>Panel Bus</td>
<td>8 AO with override (Panel)</td>
<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XF822AU</td>
<td>Analog Output Module</td>
<td>Output Module</td>
<td>Panel Bus</td>
<td>8 AO with override (Panel)</td>
<td>—</td>
<td>UL916 and UL864</td>
</tr>
<tr>
<td>XF823A</td>
<td>Digital Input Module</td>
<td>Input Module</td>
<td>Panel Bus</td>
<td>12 binary input module (Panel)</td>
<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XF823AU</td>
<td>Digital Input Module</td>
<td>Input Module</td>
<td>Panel Bus</td>
<td>12 binary input module (Panel)</td>
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<td>UL916 and UL864</td>
</tr>
<tr>
<td>XF824A</td>
<td>Digital Output Module</td>
<td>Output Module</td>
<td>Panel Bus</td>
<td>6 relay output module (Panel)</td>
<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XF824AU</td>
<td>Digital Output Module</td>
<td>Output Module</td>
<td>Panel Bus</td>
<td>6 relay output module (Panel)</td>
<td>—</td>
<td>UL916 and UL864</td>
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<tr>
<td>XFLR822A</td>
<td>Analog output manual override module</td>
<td>Distributed I/O</td>
<td>LonWorks Bus</td>
<td>8 AO with override (LON)</td>
<td>—</td>
<td>UL916</td>
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<tr>
<td>XFLR822AU</td>
<td>Analog output manual override module</td>
<td>Distributed I/O</td>
<td>LonWorks Bus</td>
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<td>Digital output manual override module</td>
<td>Distributed I/O</td>
<td>LonWorks Bus</td>
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<td>XFLR824AU</td>
<td>Digital output manual override module</td>
<td>Distributed I/O</td>
<td>LonWorks Bus</td>
<td>6 relays with override (LON)</td>
<td>—</td>
<td>UL916 and UL864</td>
</tr>
<tr>
<td>XFR822A</td>
<td>Analog output manual override module</td>
<td>Distributed I/O</td>
<td>Panel Bus</td>
<td>8 AO with override (Panel)</td>
<td>—</td>
<td>UL916</td>
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<tr>
<td>XFR822AU</td>
<td>Analog output manual override module</td>
<td>Distributed I/O</td>
<td>Panel Bus</td>
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<td>Digital output manual override module</td>
<td>Distributed I/O</td>
<td>Panel Bus</td>
<td>6 relays with override (Panel)</td>
<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XFR824AU</td>
<td>Digital output manual override module</td>
<td>Distributed I/O</td>
<td>Panel Bus</td>
<td>6 relays with override (Panel)</td>
<td>—</td>
<td>UL916 and UL864</td>
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<tr>
<td>XFR825A</td>
<td>Actuator output module</td>
<td>Distributed I/O</td>
<td>Panel Bus</td>
<td>Actuator output module (Panel)</td>
<td>—</td>
<td>UL916</td>
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<tr>
<td>XFR825AU</td>
<td>Actuator output module</td>
<td>Distributed I/O</td>
<td>Panel Bus</td>
<td>Actuator output module (Panel)</td>
<td>—</td>
<td>UL916 and UL864</td>
</tr>
</tbody>
</table>
Excel Distributed I/O

Distributed input/output modules allow you to monitor and control remote points with just a two-wire communication bus back to the main controller.

- LonMark Compliant.
- 2-wire LonWorks bus interface between controller and I/O.
- No additional field terminals required.

Application: Distributed I/O
Building Management Interface: EBI; SymmetR; ACSELON
Network Communications: LonWorks Bus
Commissioning Software: CARE 8
Used With: Excel 800 Controller

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
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<td>XFL821A</td>
<td>Distributed I/O - Analog module</td>
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<td>—</td>
<td>UL916</td>
</tr>
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<tr>
<td>XFL822A</td>
<td>Distributed I/O - Analog output</td>
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<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XFL822AU</td>
<td>Distributed I/O - Analog output</td>
<td>8 analog output module (LON)</td>
<td>—</td>
<td>UL916 and UL864</td>
</tr>
<tr>
<td>XFL823A</td>
<td>Distributed I/O - Digital module</td>
<td>12 binary input module (LON)</td>
<td>Includes 12 LEDs</td>
<td>UL916</td>
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<tr>
<td>XFL823AU</td>
<td>Distributed I/O - Digital module</td>
<td>12 binary input module (LON)</td>
<td>Includes 12 LEDs</td>
<td>UL916 and UL864</td>
</tr>
<tr>
<td>XFL824A</td>
<td>Distributed I/O - Digital output</td>
<td>6 relay output module (LON)</td>
<td>—</td>
<td>UL916</td>
</tr>
<tr>
<td>XFL824AU</td>
<td>Distributed I/O - Digital output</td>
<td>6 relay output module (LON)</td>
<td>—</td>
<td>UL916 and UL864</td>
</tr>
</tbody>
</table>

Excel 100 Controllers

The Excel 100 Controllers are direct-digital control, microprocessor-based, programmable controllers that manage building functions.

- Stand-alone or networked operation for flexible use or expansion.
- CARE generated application programs for comprehensive control strategies.
- Analog or digital inputs and outputs for flexible point use.
- Multiple operator interface options for local or easy on-site changes.
- Point trending for timely information.
- Alarm handling facility to locally display the problem and remote dial out to act on it.
- Battery-backed RAM data to keep controller programming in place during power outage.
- Bus-Wide MMI provides local viewing/modification of point information of all controllers attached to the Communication Bus.

Dimensions, Approximate: 9.25 in. high x 7.56 in. wide x 2.83 in. deep (235 mm high x 192 mm wide x 72 mm deep)

Application: Programmable Controller
Building Management Interface: EBI; SymmetR; ACSELON
Network Communications: C-Bus
Commissioning Software: CARE
Voltage: 24 Vac/Vdc
Frequency: 50 Hz; 60 Hz
Power Consumption: 25 VA Max.
Output Type: 0-10 Vdc, 20mA
Operating Temperature Range: 32 F to 122 F ( 0 C to 50 C)
Operating Humidity Range (% RH): 5 to 90% RH, non-condensing
Shipping Temperature Range: -4 F to +140 F (-20 C to 60 C)
Approvals: CE: Approved
Federal Communications Commission: Meets FCC Part 15, Subpart J for Class A equipment
Underwriters Laboratories, Inc. Form UL916

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>I/O Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>XL100CU</td>
<td>Freely Programmable DDC</td>
<td>12 Universal Outputs; 12 Universal Inputs; 12 Digital Inputs</td>
</tr>
</tbody>
</table>
Excel 50 Controllers

A compact, programmable controller that manages small building control applications. Available with or without operator interface. Provides perfect solution for managing small building control applications and HVAC equipment control applications.

- Direct communication to C-bus & LonWorks bus and/or modems.
- DIN rail or panel door mounting.
- Available with or without operator interface.
- Stand-alone or networked operation.
- CARE-generated application programs; ability to reuse available CARE applications.
- Flash-EPROM for efficient downloads.
- Wiring simplicity: accessible and removable screw terminal blocks.
- Capacitor-backed RAM; no battery required.

**Product Number** | **Description** | **I/O Count** | **Comments**
--- | --- | --- | ---
XL50A-UMMPCBLON | Freely Programmable DDC controller, with operator interface | 4 Digital Inputs, 8 Universal Inputs, 4 Universal Outputs, 6 Digital Outputs | Includes Operator Interface
XL50A-UPCCBLON | Freely Programmable DDC controller | 4 Digital Inputs, 8 Universal Inputs, 4 Universal Outputs, 6 Digital Outputs | Does not have Operator Interface

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Excel Smart I/O

Excel Smart I/O modules feature a variety of software-configurable digital and analog inputs and outputs and are suitable for installation at strategic locations throughout your buildings. The modules convert physical input signals from sensors into network variables and the network variables into physical output signals for operating actuators.

- Flexible, software-configurable inputs/outputs.
- Flash memory for downloading applications.
- 2-wire FTT-10A LonWorks bus interface.
- Easily-accessible service button and a service LED.
- DIN rail mounting and wall-mounting supported.

**Product Number** | **Description** | **Network Communications** | **I/O Count** | **Includes**
--- | --- | --- | --- | ---
XFC3A04001 | Smart I/O module. Lonmark certified. Fixed terminals | LonWorks | 2 Universal Inputs; 2 Analog Outputs; 4 Digital Inputs | Six 3-position manual overrides and 10 colored status LEDs
XFC3A06001 | Smart I/O module. Lonmark certified. Fixed terminals | LonWorks Bus | 4 Universal Inputs; 2 Analog Outputs; 4 Digital Inputs | ---
XFC3D06001 | Smart I/O module with Removable terminals. Lonmark Certified | LonWorks Bus | 4 Universal Inputs; 2 Analog Outputs; 4 Digital Inputs | ---

**Application:** Built-up AHU, Chiller, Cooling Tower, Boiler, Freely Programmable

**Building Management Interface:** EBI; SymmetrE; ACSELON

**Commissioning Software:** CARE

**Network Communications:** C-Bus; LonWorks Bus

**Voltage:** 24 Vac ± 20%

**Frequency:** 50 Hz; 60 Hz

**Power Consumption:** 72 VA, if fully equipped

**Output Type:** Analog/Modulating; Pulse Width Modulation; Floating; Staged On/Off

**Operating Temperature Range:** 32 F to 122 F (0 C to 50 C)

**Operating Humidity Range (%) RH:** 5 to 93% RH, non-condensing

**Shipping Temperature Range:** -4 F to 158 F (-20 C to 70 C)

**Includes:** C-Bus / LonWorks Bus communication card

**Approvals:**

- CE: Approved
- Federal Communications Commission: Meets FCC Part 15, Subpart J for Class A equipment
- Underwriters Laboratories, Inc. Underwriters Laboratories Inc.: Form UL916

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**Dimensions, Approximate:**

- 5 in. wide x 3 in. length x 4.33 in. high (126 mm wide x 76 mm length x 110 mm high)

**Application:** Configurable I/O

**Building Management Interface:** EBI; SymmetrE; ACSELON

**Commissioning Software:** CARE

**Voltage:** 24 Vac

**Frequency:** 50 Hz; 60 Hz

**Operating Temperature Range:** 32 F to 122 F (0 C to 50 C)

**Operating Humidity Range (%) RH:** 5 to 90% RH, non-condensing

**Shipping Temperature Range:** -22 F to +158 F (-30 C to +70 C)

**Approvals:**

- CE: CE and EN 50081-1, LonMark Application Layer Guidelines Version 3.2
The Honeywell Compact I/O are LON modules with a certain number of digital inputs, analog inputs, digital outputs, analog outputs, and hubs used to record or control network variable points (SNVT's) on a LonWorks bus.

- Configured via LNS Plug-in.
- Easy installation saves time and money.
- Compact Design.

**Dimensions, Approximate:** 1.4 in. wide x 2.8 in. high x 2.6 in. deep (35 mm wide x 71 mm high x 66 mm deep)

**Application:** Input / Output Module

**Commissioning Software:** LNS Plug-in

**Network Communications:** LonWorks Bus

**Voltage:** 20 - 28 V AC/DC

**Operating Temperature Range:** 23 F to 131 F (-5 C to 55 C)

**Shipping Temperature Range:** -4 F to +158 F (20 C to 170 C)

**Compliable with:** Compact I/O Family

**Approvals:**
- CE: Approved
- Underwriters Laboratories, Inc. UL 916

### Compact I/O Accessories

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>I/O Count</th>
<th>Power Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>XIO-10DI</td>
<td>Digital Input Module with 10 Inputs</td>
<td>10</td>
<td>63 mA (AC) / 21 mA (DC)</td>
</tr>
<tr>
<td>XIO-10HUB</td>
<td>I/O Module Expander Hub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XIO-4AO</td>
<td>Analog Output Module with 4 Outputs</td>
<td>4</td>
<td>150 mA (AC) / 70 mA (DC)</td>
</tr>
<tr>
<td>XIO-4DI</td>
<td>Digital Input Module with 4 Inputs</td>
<td>4</td>
<td>63 mA (AC) / 21 mA (DC)</td>
</tr>
<tr>
<td>XIO-4DO</td>
<td>Digital Output Module with 4 Outputs</td>
<td>4</td>
<td>205 mA (AC) / 67 mA (DC)</td>
</tr>
<tr>
<td>XIO-4NTC</td>
<td>Analog Input Module with 4 NTC Sensor Specific Inputs</td>
<td>4</td>
<td>67 mA (AC) / 24 mA (DC)</td>
</tr>
<tr>
<td>XIO-4PT1000</td>
<td>Analog Input Module with 4 PT1000 Sensor Specific Inputs</td>
<td>4</td>
<td>67 mA (AC) / 24 mA (DC)</td>
</tr>
<tr>
<td>XIO-8AI</td>
<td>Analog Input Module with 8 Inputs</td>
<td>8</td>
<td>57 mA (AC) / 30 mA (DC)</td>
</tr>
</tbody>
</table>

### LonWorks Bus Accessories

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7740A1008</td>
<td>Two way repeater with connections for two network segments</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7740B1006</td>
<td>Four way repeater with connections for four network segments</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7750A2003</td>
<td>Excel 10 Zone Manager</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751A2010</td>
<td>Excel 10 router used for connection with four network segments, FT-10/FT-10</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751A2028</td>
<td>Excel 10 router used for connection with four network segments, TP-1250/FT-10</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751E1005</td>
<td>I.LON 10-TP/FT - 10 CHANNEL</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751F1011</td>
<td>I.LON 100 - TP/FT - 10 NO MODEM Firmware version e3</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751F1029</td>
<td>I.LON 100 - TP/FT - 10 With MODEM Firmware version e3</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751G2009</td>
<td>I.LON 600 FT - 10</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751G2017</td>
<td>I.LON 600 XF1250</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>Q7751H2007</td>
<td>PCLTA-21/TP-1250</td>
<td>—</td>
</tr>
<tr>
<td>Q7751H2015</td>
<td>PCLTA-21/FT-10</td>
<td>—</td>
</tr>
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</table>
**Excel 5000® Accessories**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>14500087-004</td>
<td>Dpdt relay with 12 Vdc coil, switches 120 Vac or 28 Vdc @ 3 amps, used with 14507222 Relay for XL100 Controller</td>
<td>14507222</td>
</tr>
<tr>
<td>14506747-002</td>
<td>sub-panel for full sized cabinet</td>
<td>Panels</td>
</tr>
<tr>
<td>14507063-002</td>
<td>Power Supply Cable To Connect Power To Excel Controller</td>
<td>XL5000</td>
</tr>
<tr>
<td>14507063-003</td>
<td>Power Supply Cable (Tinned Ends) To Connect Power Module To Excel Controller</td>
<td>XL5000</td>
</tr>
<tr>
<td>14507222-001</td>
<td>Relay Module, Four Relays. Includes Hand-Off-Auto Switches and LEDs</td>
<td>XL500/600; XL100B</td>
</tr>
<tr>
<td>14507287-001</td>
<td>Power Module, 120 Vac Input, 50 VA Controller Transformer with Convertible Outlet and Breaker</td>
<td>XL5000</td>
</tr>
<tr>
<td>14507287-002</td>
<td>Power Module, 120 Vac Input, 50 VA Controller Transformer Plus 100 VA Accessory Transformer With Convertible Outlet and Breaker</td>
<td>XL5000</td>
</tr>
<tr>
<td>14507287-003</td>
<td>Power Module, 120 Vac Input, 50 VA Controller Transformer Plus 100 VA Accessory Transformer and 24 Vdc Accessory Transformer With Convertible Output and Breaker</td>
<td>XL5000</td>
</tr>
<tr>
<td>Product Number</td>
<td>Description</td>
<td>Used With</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>14507287-007</td>
<td>50 VA Excel 5000 access power module for Excel 5000 applications</td>
<td>XL5000</td>
</tr>
<tr>
<td>14507324-001</td>
<td>High speed, c-bus network repeater, panel mount (without cover) to extend bus length</td>
<td>XL5000</td>
</tr>
<tr>
<td>14507549-001</td>
<td>External RS-485 adaptor module to directly connect a PC to a C-bus</td>
<td>C-Bus</td>
</tr>
<tr>
<td>14507551-001</td>
<td>Cable assembly, com port to adapter module, 30 in.</td>
<td>14507549</td>
</tr>
<tr>
<td>14507551-002</td>
<td>Cable assembly, com port to adapter module, 10 ft</td>
<td>14507549</td>
</tr>
<tr>
<td>14507552-001</td>
<td>Cable assembly, power to adapter module, used with C-Bus and XBS, 11 inches long</td>
<td>14507549</td>
</tr>
<tr>
<td>14507552-002</td>
<td>Cable assembly, power to adapter module, used with C-Bus and XBS, 15 inches long</td>
<td>14507549</td>
</tr>
<tr>
<td>206317A</td>
<td>Excel 10 termination module, FTT-10</td>
<td>XL10</td>
</tr>
<tr>
<td>207912</td>
<td>Track mounting for a W7751A, B</td>
<td>XL10</td>
</tr>
<tr>
<td>209541B</td>
<td>Terminator module for FTT network (1 required for T-Tap, Star, Mixed or Loop network topologies, 2 Required for Daisy chain network topology)</td>
<td>XL10</td>
</tr>
<tr>
<td>32000180-004</td>
<td>Replacement cable for use with Q7752B2009</td>
<td>Q7752B2009</td>
</tr>
<tr>
<td>32002516-001</td>
<td>Cable to connect Serial LonTalk adapter to Audio-type bus connection on LonMark Controller</td>
<td>LonMark Controllers</td>
</tr>
<tr>
<td>32002517-001</td>
<td>Cable to connect serial LonTalk adapter to a modem.</td>
<td>XL10</td>
</tr>
<tr>
<td>EXCE Lon</td>
<td>EXCE Lon LonWork Network Management Tool, Software License Required.</td>
<td>Excel 5000</td>
</tr>
</tbody>
</table>
## Excel 5000

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
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<tbody>
<tr>
<td>MCE3</td>
<td>Relay Module, Two Spdt Outputs, One Spst Output</td>
<td></td>
</tr>
<tr>
<td>XAL10</td>
<td>Labels (Package Of 10)</td>
<td>XL800</td>
</tr>
<tr>
<td>XAL2</td>
<td>Cover Release Tools (Package Of 10) for Distributed I/O</td>
<td>XL5000</td>
</tr>
<tr>
<td>XL-ONLINE-CD</td>
<td>Excel Online, Commissioning tool for EXCEL 5000 Controllers</td>
<td>Excel 5000</td>
</tr>
<tr>
<td>XL50ACC3</td>
<td>Panel Mounting Kit for XL50</td>
<td>XL50</td>
</tr>
<tr>
<td>XM500-US</td>
<td>Remote communication module, TCP/IP WAN Modem. Emulates a Hayes compatible phone modem to convert serial data to Ethernet - TCP/IP packets.</td>
<td>Excel 5000 Controllers</td>
</tr>
<tr>
<td>XS50</td>
<td>XL50 Terminal Block Set</td>
<td>XL50</td>
</tr>
<tr>
<td>XS812</td>
<td>Test Connector</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS812RO</td>
<td>Test Connector for relay outputs</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS814</td>
<td>Auxiliary terminal block (10)</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS815</td>
<td>Cross Connector 6 Relays (20)</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS816</td>
<td>Bus Bridge (10)</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS817</td>
<td>Cross Connector 3 Relays (40)</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS821-22</td>
<td>Terminal socket analog modules</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS823</td>
<td>Terminal socket binary input</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XS824-25</td>
<td>Terminal socket relay output</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XW882</td>
<td>Cable from XI582 to XL800-RS232(RJ45)</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XW884</td>
<td>Adapter cable, XI582 (RJ45) to old XL500</td>
<td>Excel 800 Distributed I/O</td>
</tr>
<tr>
<td>XW885</td>
<td>Cable from PC to XL800-RS232(RJ45)</td>
<td>Excel 800 Distributed I/O</td>
</tr>
</tbody>
</table>
WEBs SYSTEM ARCHITECTURE

HVAC

- WEB-600
- VAV
- AHU
- CV AHU
- UV

SECURITY

- COMMUNICATING THERMOSTAT
- INTRUSION KEYPAD/ DISPLAY
- SECURITY
- ELEVATOR CONTROL
- ACCESS CONTROL TIME AND ATTENDANCE

VIDEO

- VIDEO MONITORING AND CONTROL

3RD PARTY

- WEB-NXS
- MODBUS®

HVAC OPTIONS:

PROGRAMMABLE ZONE CONTROLLERS

- PUL6438S
- PUL1012S
- PUL4024S
- PUB6438S
- PVL6438NS
- PVL4024NS
- PVB6438NS
- PVL4022AS
- PVL6436AS
- PVB6436AS

ZONE CONTROLLERS

- T7350H
- W7750
- W7751
- W7752
- W7753
- W7761
- W7762
- W7763

CENTRAL PLANT CONTROLLERS

- EXCEL 50 CONTROLLER
- EXCEL 800 CONTROLLER
- DISTRIBUTED INPUT/OUTPUT MODULES
WEB-201 Controller

The Honeywell WEB-201 controller is a compact, embedded controller/server platform. Its combined integrated control, supervision, data logging, alarming, scheduling, and network management features in a small, compact platform. The WEB-201 controller is a member of the Honeywell WEBs-AX suite of JAVA based controller/server products.

- Runs stand-alone control, energy management, and multi-protocol integration.
- Web User Interface serves rich presentation and live data to a browser.
- Standard and optional communications boards.
- Can be expanded with optional IO-16-H and IO-34-H I/O modules.
- Small compact design is easy to install and supports multiple power options.

Dimensions, Approximate: 6 3/8 in. wide x 4 7/64 in. high x 2.5 in. deep (16.2 cm wide x 10.5 cm high x 6.4 cm deep)

Application:
- Controller
- Application Size: Approximately 15 - 20 nodes
- Operating Temperature Range: 32 F to 122 F (0 C to 50 C)
- Operating Humidity Range (% RH): 5 to 95% RH, non-condensing
- Shipping Temperature Range: 32 F to 140 F (0 C to 60 C)
- Used With: WEB-201 Platform
- Compatible with: WEB-201 Platform

Approvals:
- Canadian Standards Association: CSA C22.2 No. 205-M1983 Signal Equipment
- CE: Approved
- Federal Communications Commission: FCC part 15 Class A
- Underwriters Laboratories, Inc. UL 916, C-UL listed

WEB-600 Controller

The WEB-600 is ideal for smaller facilities, remote sites, and for distributing control and monitoring throughout large facilities. Optional I/O modules can be plugged in for applications where local control is required. The WEB-600 controller also supports a wide range of field busses for connection to remote I/O and stand-alone controllers. In small facility applications, the WEB-600 controller is all you need for a complete system.

The WEB-600 controller serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, or dial-up modem. In larger facilities, multi-building applications and large scale control system integrations, WEBs-AX software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of WEBs-AX controllers into a single unified application. The WEBStation-AX Supervisor can manage general control functions, support data passing over multiple networks, connect to enterprise level software applications, and host multiple, simultaneous client workstations connected over the local network, the Internet, or dial-up modem.

- Run stand-alone control, energy management, and multi-protocol integration.
- Standard and optional communications boards.
- Can be expanded with optional 16 and 34 point I/O Modules.
- Small compact design is easy to install and supports multiple power options.
- Embedded IBM® Power PC Platform.

Dimensions, Approximate: 6 3/8 in. wide x 4 7/64 in. high x 2.5 in. deep (16.2 cm wide x 10.5 cm high x 6.4 cm deep)

Application:
- Controller
- Application Size: Approximately 15 - 20 nodes
- Operating Temperature Range: 32 F to 122 F (0 C to 50 C)
- Operating Humidity Range (% RH): 5 to 95% RH, non-condensing
- Shipping Temperature Range: 32 F to 140 F (0 C to 60 C)
- Used With: WEB-600 Platform
- Compatible with: WEB-600 Platform

Approvals:
- Canadian Standards Association: CSA C22.2 No. 205-M1983 Signal Equipment
- CE: Approved
- Federal Communications Commission: FCC part 15 Class A
- Underwriters Laboratories, Inc. UL 916, C-UL listed

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEB-201</td>
<td>WEB-201 Controller</td>
<td>WEB User Interface, Niagara Connectivity (Fox), oBix Client/Server driver</td>
</tr>
<tr>
<td>WEB-201-O</td>
<td>WEB-201 Controller with Open License</td>
<td>WEB User Interface, Niagara Connectivity (Fox), oBix Client/Server driver</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEB-600</td>
<td>WEB-600 Controller</td>
<td>WEB User Interface, Niagara Connectivity (Fox), oBix Client/Server driver</td>
</tr>
<tr>
<td>WEB-600-O</td>
<td>WEB-600 Controller with Open License</td>
<td>WEB User Interface, Niagara Connectivity (Fox), oBix Client/Server driver</td>
</tr>
</tbody>
</table>
WEB-201 / WEB-600 I/O Modules

The Honeywell I/O modules are compact direct I/O modules for auxiliary monitoring and control when used with a WEB-201 and WEB-600 series controller or other controller platforms as identified in their respective data sheets. This option expands the controllers by an additional sixteen or thirty-four logic-controlled points. This greatly expands the controller monitoring and control capabilities with fast, reliable, direct inputs and outputs for monitoring power, temperature, humidity and status.

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>I/O Count</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IO-16-H</td>
<td>16 Point Input / Output Expansion Module</td>
<td>8 Universal Inputs; 4 Digital Relay Outputs; 4 Analog Outputs</td>
<td>Internally dedicated 24 Volt Power Supply</td>
</tr>
<tr>
<td>IO-34-H</td>
<td>34 Point Input / Output Expansion Module</td>
<td>16 Universal Inputs; 10 Digital Relay Outputs; 8 Analog Outputs</td>
<td></td>
</tr>
</tbody>
</table>

WEB-201/WEB-600 Drivers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPM-128</td>
<td>WEB-201 Memory Expansion License from 64 to 128 MB</td>
<td>WEB-201 Platform</td>
</tr>
<tr>
<td>NPM-256MB</td>
<td>WEB-600 Memory Expansion License from 128 to 256 MB</td>
<td>WEB-600 Platform</td>
</tr>
<tr>
<td>DR-JAC-DED-AX</td>
<td>WEB Video Driver for 4 cameras on DM DVR</td>
<td>SEC-H-600 / WEB-600</td>
</tr>
<tr>
<td>DR-JAC-AXS-4</td>
<td>WEB Video Driver for 4 Axis cameras</td>
<td>SEC-H-600 / WEB-600</td>
</tr>
</tbody>
</table>

WEB-201/WEB-600 Accessories

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPB-MDM</td>
<td>NPB-MDM Modem card</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>NPB-GPRS-W-H</td>
<td>GPRS Modem Kit</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>NPB-LON</td>
<td>LoniWorks Communication Card for WEB-201/600</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>NPB-2X-RS485</td>
<td>Dual Port RS-485 Communication Card for WEB-201 / 600</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>DR-LONFT10-AX</td>
<td>LONworks FTT10 Driver and NPB-LON card bundle</td>
<td>WEB-201/600 Platform</td>
</tr>
<tr>
<td>NPB-RS232</td>
<td>Single Port RS-232 Communication Card for WEB-201 / 600</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>NPB-PWR-H</td>
<td>NPB-PWR-H 24 Volt Power Module</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>NPB-WPM-US</td>
<td>NPB-WPM-US Wall Power Module</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>NPB-PWR-UN-H</td>
<td>Universal input DIN mounted power module, 90 - 263 V AC input</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>ENC-H-001</td>
<td>WEBs Small Enclosure</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>ENC-H-002</td>
<td>WEBs Large Enclosure</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>ENC-H-BPK-1</td>
<td>WEBs Small Enclosure Backplate (8 in. X 11 in.)</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
<tr>
<td>ENC-H-BPK-2</td>
<td>WEBs Large Enclosure Backplate (11 in. X 11 in.)</td>
<td>WEB-201, WEB 600 Platform</td>
</tr>
</tbody>
</table>
WEBs System

WEB 403 AX Controller

The AX Platform of controllers include smarter applications that provide valuable information, stronger tools that empower users, and all with a faster time-to-market with Web-services applications. The WEB-403 AX bundles WEBs software capability in a hardware platform that can be installed in typical building control environments. Each WEB-403 AX connects to a system field bus and provides real-time control functions as constant streams of data from individual systems are instantaneously transformed to a common object model. The products provide a fully distributed system when multiple units are networked together, which provides unsurpassed scalability and reliability. In this configuration, WEBs can be used to network controllers and manage enterprise-level control functions. The appropriate model is determined by connectivity and computing power requirements.

- Embedded RISC Microprocessor platform.
- 128 MB RAM / 32 MB Flash
- One Lon FTT10A port for Lon device integration.
- Optional web UI services to support many simultaneous users over the intranet or Internet via a standard web browser (WEB-545-UI only).

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEB-403-AX</td>
<td>WEB 403 AX Controller</td>
<td>LONWorks FT10 driver, BACnet MSTP driver, BACnet IP Client driver, 128 MB RAM, 32 MB Flash; One 10/100 MB Ethernet port - RJ-45 connection, One RJ-45 connector for RS-232 port, One RS-485 port, One LonWorks port - FTT-10 with Weidmuller connector</td>
</tr>
<tr>
<td>WEB-403-AX-E</td>
<td>WEB-403-AX-E Controller with Expanded Memory</td>
<td>LonWorks FT10 driver, BACnet MSTP driver, BACnet IP Client driver, 256 MB RAM, 128 MB Flash; One 10/100 MB Ethernet port - RJ-45 connection, One RJ-45 connector for RS-232 port, One RS-485 port, One LonWorks port - FTT-10 with Weidmuller connector</td>
</tr>
<tr>
<td>WEB-403-AX-O</td>
<td>WEB-403-AX-O Controller w/ open license</td>
<td>LONWorks FT10 driver, BACnet MSTP driver, BACnet IP Client driver, 128 MB RAM, 32 MB Flash; One 10/100 MB Ethernet port - RJ-45 connection, One RJ-45 connector for RS-232 port, One RS-485 port, One LonWorks port - FTT-10 with Weidmuller connector</td>
</tr>
<tr>
<td>WEB-403-EZ</td>
<td>WEB-403 EZ Controller Easy-pack bundle</td>
<td>LONWorks FT10 driver, BACnet MSTP driver, BACnet IP Client driver, 128 MB RAM, 32 MB Flash; One 10/100 MB Ethernet port - RJ-45 connection, One RJ-45 connector for RS-232 port, One RS-485 port, One LonWorks port - FTT-10 with Weidmuller connector</td>
</tr>
<tr>
<td>WEB-403-EZO</td>
<td>WEB-403-EZ Controller w/ open license</td>
<td>LONWorks FT10 driver, BACnet MSTP driver, BACnet IP Client driver, 128 MB RAM, 32 MB Flash; One 10/100 MB Ethernet port - RJ-45 connection, One RJ-45 connector for RS-232 port, One RS-485 port, One LonWorks port - FTT-10 with Weidmuller connector</td>
</tr>
</tbody>
</table>

WEB 545 AX Controller

The AX Platform of controllers include smarter applications that provide valuable information, stronger tools that empower users, and all with a faster time-to-market with Web-services applications. Specifically designed for commercial applications, the WEB-545 AX is ideally suited for users who require a compact controller that can be wall or enclosure mounted. A single WEB-545 AX controller can support a network of devices via the LonWorks port and auxiliary devices that can be accessed directly via onboard I/O, or through the 4 RS-485 ports, or an RS-232 port (unless used by the optional internal modem). The WEB-545 AX can integrate any combination of LON®, Modbus, BACnet, or legacy devices with the appropriate optional drivers.

- Embedded RISC Microprocessor platform.
- Wind River VxWorks Operating System with Jeode Virtual Machine.
- Java Application Control Engine Software with I/O control objects.
- 128 MB RAM / 32 MB Flash
- One Lon FTT10A port for Lon device integration.
- Four RS-485 ports (electrically isolated) for connection to open and proprietary protocol devices.
- Two RS-232 port for integration or support of an optional internal modem.
- Optional web UI services to support many simultaneous users over the intranet or Internet via a standard web browser (WEB-545-UI only).

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEB-545-AX</td>
<td>WEB-545 AX Expanded Memory Controller with open license</td>
<td>LONWorks FT10 driver, BACnet MSTP driver, BACnet IP Client driver, 128 MB RAM, 32 MB Flash; One 10/100 MB Ethernet port - RJ-45 connection, two RJ-45 connectors for RS-232 port, four RS-485 ports, one LonWorks port - FTT-10</td>
</tr>
<tr>
<td>WEB-5R-AX</td>
<td>WEB-545 AX Controller in a Rack-mount Case</td>
<td>Includes 256 MB Ram/128 MB Flash, (1)10/100 Mb Ethernet port, (2) RS-232 serial port, (4) RS-485 isolated ports, (1) LonWorks FTT 10 port Niagara station and Web User Interface</td>
</tr>
</tbody>
</table>
WEB-NXS Controller

Specifically designed for commercial and light industrial applications, the WEBs NXS controllers have 512 MB RAM standard, 1 Gb Flash drive, and a 400 MHz Celeron processor - making it ideally suited for users who require more processing power, or a large amount of archives or graphics.

Because it has a PC processor platform with hard disk and embedded Microsoft® Windows XP, the NXS is ideal for organizations whose IT policies dictate Microsoft products or when applications such as OPC require a Windows-based operating system. The W-NXS-AX-FL controller includes an integral UPS.

The WEBs NXS controllers have no moving parts and can be wall or enclosure mounted. A single NXS controller can support a network of devices via the LonWorks port and auxiliary devices that can be accessed though the RS-465 port or the RS-232 port. MSTP protocols are not supported on the NXS controllers.

- High performance Intel® Celeron® Microprocessor provides fast, reliable processing
- Real-time control engine provides local closed loop control across protocols
- Integral energy management routines
- Trending, scheduling, alarm notification via email
- Distributed architecture provides scalability and reliability
- Can be integrated with other WEBs controllers for large scale systems
- Options for either a Flash memory-based or hard drive-based version

**Application:** Controller

**Dimensions, Approximate:** 6 13/16 in. wide x 7 9/16 in. high (172 cm wide x 192 cm high)

**Operating Temperature Range:** 32 F to 122 F (0 C to 50 C)

**Operating Humidity Range (% RH):** 5 to 95% RH, non-condensing

**Shipping Temperature Range:** 32 F to 158 F (0 C to 70 C)

**System Requirements:** Real-time clock with lithium battery backup; 1 Gb Flash drive (W-NXS-AX-FL) or 40 Gb hard drive (W-NXS-AX-HD and WEB-NXS-R2); 512 MB RAM; High Speed Intel Celeron CPU @ 650 MHz

**Network Communications:** One LON FTT10 A port (78 Kbps); One RS-485 Port, electrically isolated; One high-speed RS-232 serial port; DB-9 connector; One 10/100-mbit Ethernet port - RJ 45 connection

**Power Input:** 2A Max/115V and 1A Max/230V

**Used With:** WEBs AX Platform

**Comments:** Construction: Heavy-duty steel chassis

**Approvals:**
- Canadian Standards Association: CSA C22.2 No. 205-M1983 Signal Equipment
- CE: Approved
- Federal Communications Commission: FCC part 15 Class A
- Underwriters Laboratories Inc.: UL 916
- Underwriters’ Laboratories of Canada: cUL listed

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Operating System</th>
<th>Compatible with:</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>W-NXS-AX-FL</td>
<td>NXS controller with 1 GB flash drive and NiagaraAX software version 3.1 or later, UPS power supply, embedded Windows XP, Web User Interface, oBIX Client/Server driver, Niagara Network (Fox) Client/Server driver and LON over twisted pair.</td>
<td>Embedded version of Microsoft Windows™ XP, Microsoft Java Virtual, Java Application Control Engine with NiagaraAX 3.1 or later</td>
<td>W-NXS-AX Platform</td>
<td>512 MB RAM, 10/100 MB Ethernet Port, (1) RS-232 Ports, (1) RS-485 Port, (1) LONWorks port and driver, BACnet and oBix drivers</td>
</tr>
<tr>
<td>W-NXS-AX-HD</td>
<td>NXS controller with 40 Gb hard drive and Niagara AX software version 3.1 or later, embedded Windows XP, Web User Interface, oBIX Client/Server driver, Niagara Network (Fox) Client/Server driver and LON over twisted pair.</td>
<td>Embedded version of Microsoft Windows™ XP, Microsoft Java Virtual, Java Application Control Engine with NiagaraAX 3.1 or later</td>
<td>W-NXS-AX Platform</td>
<td>512 MB RAM, 10/100 MB Ethernet Port, (2) RS-232 Ports, (1) RS-485 Port, (1) LONWorks port and driver, BACnet and oBix drivers</td>
</tr>
<tr>
<td>WEB-NXS-R2</td>
<td>NXS controller with 40 Gb hard drive and Niagara Release 2 (R2) software, embedded Windows SP and LON over twisted pair.</td>
<td>Embedded version of Microsoft Windows™ XP, Sun Hotspot VM, Java Application Control Engine with Niagara R2</td>
<td>W-NXS-R2 Platform</td>
<td>512 MB RAM, 10/100 MB Ethernet Port, (1) RS-232 Ports, (1) RS-485 Port, (1) LONWorks port and driver, BACnet and oBix drivers, 40 GB Hard Drive</td>
</tr>
</tbody>
</table>

**WEB-NXS Controller Accessories**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Compatible with:</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>NXS-UI</td>
<td>User Interface for WEB-NXS-R2 Controller</td>
<td>W-NXS-R2 Platform</td>
<td>—</td>
</tr>
<tr>
<td>NXS-UPS</td>
<td>Optional UPS upgrade for W-NXS-AXHD or WEB-NXS-R2. Provides UPS module with battery.</td>
<td>W-NXS-AX Platform, W-NXS-R2 Platform</td>
<td>WEB UI Server option for WEB-NXS-R2 only</td>
</tr>
</tbody>
</table>
### WEB-403/WEB-545 Drivers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-SP-4XX</td>
<td>WEB 403 Enterprise Connectivity Pack</td>
<td>WEB-403</td>
</tr>
<tr>
<td>UI-SP-4XX</td>
<td>WEB 403-AX Web User Interface</td>
<td>WEB-403</td>
</tr>
<tr>
<td>EC-SP-5XX</td>
<td>WEB 545 Enterprise Connectivity Pack</td>
<td>WEB-545</td>
</tr>
<tr>
<td>UI-SP-5XX</td>
<td>WEB 545-AX Web User Interface</td>
<td>WEB-545</td>
</tr>
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</table>

### WEB-403/WEB-545 Accessories

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEM-401</td>
<td>Modem option for WEB-403-AX and WEB-545-AX controllers</td>
<td>WEB-403/WEB-545</td>
</tr>
<tr>
<td>WEB-WMT-BKT</td>
<td>Wall Mount Brackets for WEB-5R-AX/O Controller</td>
<td>WEB-5R-AX</td>
</tr>
</tbody>
</table>
### WEBs AX Platform - Workstations and Tools

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEB-S-AX</td>
<td>WEBStation-AX Workstation software for Windows XP</td>
<td>WEBs AX Platform</td>
</tr>
<tr>
<td>WEB-S-AX-SBS</td>
<td>Small Building System WEBStation-AX, for 3 controllers</td>
<td>WEBs AX Platform</td>
</tr>
<tr>
<td>WEB-S-AX-W</td>
<td>AX Workbench</td>
<td>WEBPro-AX Programming Software; WEBs AX Platform</td>
</tr>
<tr>
<td>WEB-S-AX-LNX</td>
<td>WEBStation-AX Workstation for Linux</td>
<td>WEBs AX Platform</td>
</tr>
<tr>
<td>WEB-S-AX-64</td>
<td>WEBStation-AX Workstation for 64 bit Windows</td>
<td>WEBs AX Platform</td>
</tr>
</tbody>
</table>

### WEBs AX Platform - Drivers for Controllers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR-BAC-CLI-AX</td>
<td>BACnet IP Client Driver over Ethernet</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-BAC-SRV-AX</td>
<td>BACNet Server includes BACNet IP Client</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-FLX-AX</td>
<td>Flex Driver over RS-232 or RS-485</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-LONDRIV-AX</td>
<td>LON FTT10 Driver</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-LON-IP-AX</td>
<td>LON over IP Driver</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-MBUS232-AX</td>
<td>M-Bus RS-232 Driver</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-MDB-AX</td>
<td>Driver for Modbus RTU or ASCII over RS-485 or RS232</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-MDB-S-AX</td>
<td>Data server to Modbus Master devices over RS485</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-MDB-TCP-AX</td>
<td>Driver for Modbus TCP (25 node limit recommended)</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-MDB-TS-AX</td>
<td>Data server to Modbus Master devices over TCP</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-MSTP-AX</td>
<td>MSTP BACnet communications via RS-485 port</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600</td>
</tr>
<tr>
<td>DR-OPC-CL-AX</td>
<td>OPC client driver for JACE-NX</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>DR-SNMP-AX</td>
<td>Driver for importing data from SNMP compliant devices. Also exports WEBs alarms to SNMP devices</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
<tr>
<td>WEB-AX-EMB</td>
<td>Embedded WEBPro-AX tool</td>
<td>WEB-201; WEB-403; WEB-545; WEB-600 WEB-NXS</td>
</tr>
</tbody>
</table>

### WEBs AX Platform - Drivers for WEBs Supervisors

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR-NS-BAC-500</td>
<td>Additional 500 point block for WEBStation-AX BACnet Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-BAC-AX</td>
<td>AX Supervisor BACnet Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-MDB-500</td>
<td>Additional 500 point block for WEBStation-AX MDB TCP Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-MDB-AX</td>
<td>AX Supervisor Modbus TCP Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-OBIX-500</td>
<td>Additional 500 point block for AX Supervisor oBix Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-OBIX-AX</td>
<td>AX Supervisor oBix Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-OPC-500</td>
<td>Additional 500 point block for WEBStation-AX OPC Client Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-OPC-AX</td>
<td>AX Supervisor OPC Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-SNMP-500</td>
<td>Additional 500 point block for WEBStation-AX SNMP Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-NS-SNMP-AX</td>
<td>AX Supervisor SNMP Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-SUP-AXS-4</td>
<td>WEB Supervisor Video Driver for 4 additional Axis cameras</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-SUP-AXS-AX</td>
<td>WEB Supervisor BASE Video Driver for Axis Cameras</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-SUP-DED-4</td>
<td>WEB Supervisor Video Driver for 4 additional cameras</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>DR-SUP-DED-AX</td>
<td>WEB Supervisor BASE Video Driver for Dedicated Micros DVR</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>S-AX-BCSRV-AX</td>
<td>AX Supervisor BACnet IP Server Driver</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>S-DB-CSV</td>
<td>File Network Device Driver for importing CSV files</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>S-DB-DB2</td>
<td>WEBStation-AX driver for DB2 database</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>S-DB-ORCL</td>
<td>WEBStation-AX driver for Oracle database</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
<tr>
<td>S-DB-SQL</td>
<td>WEBStation-AX driver for Microsoft SQL database</td>
<td>WEB-S-AX; WEB-S-AX-LNX; WEB-S-AX-64; WEB-S-AX-SBS</td>
</tr>
</tbody>
</table>
WEBs System

SEC-H-201

WEBsAX is a product suite developed on the Niagara Framework® that provides an end-to-end building automation solution. WEBsAX is a fully distributed system when multiple units are networked together, providing unsurpassed scalability and reliability. Users can seamlessly integrate BACnet IP (client), BACnet MSTP, OPC® and other standard protocols with legacy systems to provide a unified real-time controls network. The WEBsAX automation system includes a browser-based graphical user interface allowing users to view and manipulate underlying systems without the need for dedicated workstations or client software.

The WEBsAX Security Controller provides an out of the box, web-enabled solution, for access control and intrusion detection with integrated reporting and alarm management. Users can assign access rights, schedules, credentials, and provide system set up, and maintenance via a web browser from anywhere in the world. The easy to use security control application and user interface are embedded in the WEBsAX Security Controller requiring no additional software to set up or operate the system. The embedded application can provide complete access control and intrusion detection functionality in a stand alone mode or it can be easily integrated into the WEBsAX automation system to control lighting, HVAC equipment, and other building management strategies in response to access events and system alarms.

- Integrated management of access control, alarm monitoring, and credential database
- Pre-defined custom reports on-screen or exported
- Web-based security application - easily managed via a web browser anytime, anywhere
- Web User Interface serves rich presentations and live data to a browser
- No thick client software required
- Custom graphic floor plans and equipment displays
- User-definable Wiegand card formats
- Intuitive, guided setup wizard
- Robust, modular solution for smaller facilities
- Seamlessly integrates to HVAC, Lighting, and Energy Management in the WEBsAX Automation System
- Connectivity to any BAS system via BACnet®, and oBIX
- IT connectivity includes XML, oBIX, SNMP
- Built on the NiagaraAX Framework - the industry's leading facility management software platform
- SEC-H-201: Expandable to 16 readers and 64 input and 64 output points. Up to 2500 personnel credentials

| Application: | Controller |
| Operating System: | QNX RTOS; IBM J9 JVM Java Virtual Machine; NiagaraAX |
| Network Communications: | 1 RS 485 I RS 232 Port (9 pin D-shell connector); 2 Ethernet Ports - 10/100 Mbps (RJ-45 Connectors) |
| Frequency: | 50 Hz; 60 Hz |
| Operating Temperature Range: | 32 F to 122 F ( 0 C to 50 C) |

<table>
<thead>
<tr>
<th>Product Number</th>
<th>System Requirements</th>
<th>Comments</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEC-H-201</td>
<td>PowerPC 405EP 250 MHz processor with 128 MB SDRAM &amp; 64 MB Serial Flash</td>
<td>The Security Controller is designed for DIN rail mounting</td>
<td>WEBsAX security appliance, Web UI, Niagara Network Connectivity, and BACnet Server IP. Contains removable screw terminal connectors, and status indication LEDs. Connections for 2 Card Readers, 6 Supervised Inputs, 4 Form C Relay Outputs, and 3 Digital Inputs. Includes 64 MB RAM/64 MB Flash, 2 10/100 Mb Ethernet ports, (1) RS-485 serial port, (1) RS-232 serial port, and 2 communication card option slots.</td>
</tr>
</tbody>
</table>

Federal Communications Commission: FCC part 15 Class A...
WEBsAX is a product suite developed on the Niagara Framework® that provides an end-to-end building automation solution. WEBsAX is a fully distributed system when multiple units are networked together, providing unsurpassed scalability and reliability. Users can seamlessly integrate BACnet IP (client), BACnet MSTP, OPC®, and other standard protocols with legacy systems to provide a unified real-time controls network. The WEBsAX automation system includes a browser-based graphical user interface allowing users to view and manipulate underlying systems without the need for dedicated workstations or client software.

The WEBsAX Security Controller provides an out of the box, web-enabled solution, for access control and intrusion detection with integrated reporting and alarm management. Users can assign access rights, schedules, credentials, and provide system set up, and maintenance via a web browser from anywhere in the world. The easy to use security control application and user interface are embedded in the WEBsAX Security Controller requiring no additional software to set up or operate the system. The embedded application can provide complete access control and intrusion detection functionality in a stand alone mode or it can be easily integrated into the WEBsAX automation system to control lighting, HVAC equipment, and other building management strategies in response to access events and system alarms.

• Integrated management of access control, alarm monitoring, and credential database
• Pre-defined custom reports on-screen or exported

Product Number | System Requirements | Comments | Includes
--- | --- | --- | ---

WEBsAX Security I/O Modules

Application: Controller

Product Number | Description | Includes
--- | --- | ---
SEC-H-R2R | WEBs-AX Security Reader Module | Connections for 2 proximity card readers, 4 Supervised Inputs, 2 Form C Relay Outputs, and 2 Digital Inputs. Contains removable screw terminal connectors, and status indication LEDs.
SEC-H-RIO | WEBs-AX Security Input/Output Module | Connections for 8 Supervised Inputs, 8 Form C Relay Outputs, and 2 Digital Inputs. Contains removable screw terminal connectors, and status indication LEDs.
# WEBs System

## WEBs-AX Security Accessories

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>712BNP</td>
<td>12V 7AH Battery</td>
<td>Battery</td>
</tr>
<tr>
<td>EXB-1</td>
<td>Egress Button</td>
<td>Request-to-Exit</td>
</tr>
<tr>
<td>HP300ULX</td>
<td>12/24 VDC Power Supply, 2.5 AMP with Battery Backup</td>
<td>Power Supply</td>
</tr>
<tr>
<td>HP300ULPD4CB</td>
<td>12/24 VDC Power Supply, 2.5 AMP, 4 Outputs, with Battery Backup</td>
<td>Power Supply</td>
</tr>
<tr>
<td>HP400ULX</td>
<td>12/24 VDC Power Supply, 4 AMP with Battery Backup</td>
<td>Power Supply</td>
</tr>
<tr>
<td>HP400ULPD4CB</td>
<td>12/24 VDC Power Supply, 4 AMP, 4 Outputs, with Battery Backup</td>
<td>Power Supply</td>
</tr>
<tr>
<td>HP600ULX</td>
<td>12/24 VDC Power Supply, 6 AMP with Battery Backup</td>
<td>Power Supply</td>
</tr>
<tr>
<td>HP600ULPD16CB</td>
<td>12/24 VDC Power Supply, 6 AMP, 4 Outputs, with Battery Backup</td>
<td>Power Supply</td>
</tr>
<tr>
<td>IS310BL</td>
<td>Request-to-Exit Sensor, Standard Version - Black</td>
<td>Request-to-Exit</td>
</tr>
<tr>
<td>IS310WH</td>
<td>Request-to-Exit Sensor, Standard Version - White</td>
<td>Request-to-Exit</td>
</tr>
<tr>
<td>ML8011-LC-US28</td>
<td>Magnetic Lock, 1,200lbs, 12 VDC - US 28 Finish</td>
<td>Magnetic Lock</td>
</tr>
<tr>
<td>NPB-PWR-UN-H</td>
<td>Universal input DIN mounted power module, 90 - 263 V AC input</td>
<td>Power Module</td>
</tr>
<tr>
<td>NS5100</td>
<td>1300lb Electric Strike, 12/24V, Non-Handed, Includes 3 Face Plates for Most Door Types</td>
<td>Electric Door Strike</td>
</tr>
<tr>
<td>OP10HONE</td>
<td>OmniProx Small Mount Reader with Honeywell Logo</td>
<td>Card Reader</td>
</tr>
<tr>
<td>OP30HONE</td>
<td>OmniProx Mullion Mount Reader with Honeywell Logo</td>
<td>Card Reader</td>
</tr>
<tr>
<td>OP40HONE</td>
<td>OmniProx Wall Mount Reader with Honeywell Logo</td>
<td>Card Reader</td>
</tr>
<tr>
<td>OP90HONE</td>
<td>OmniProx Vandal Resistant Mount Reader with Honeywell Logo</td>
<td>Card Reader</td>
</tr>
<tr>
<td>OT36HONA</td>
<td>Omni-Assure Reader with Keypad</td>
<td>Card Reader</td>
</tr>
<tr>
<td>PVC-H-4</td>
<td>HID PVC Prox Card (34 Bit)</td>
<td>PROX Card</td>
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</tbody>
</table>
WebStat Controller

WebStat allows you to step up from standalone thermostat control to the automated T7350 communicating thermostat platform without incurring any excessive direct digital control (DDC) cost or complexity. Automation features include web control, alarming, trending, scheduling, network accessibility, and floor plans. Operational savings are enabled by remote monitoring, alarming, floor plan visuals and thermostat assignment privileges for tenants, facility managers and contractors. WebStat keeps control simple by allowing Internet accessibility and flexibility for assigning user privileges.

- Remote Monitoring
- Remote Programming
- Plug-and-Play Setup
- Universal Programming, Commissioning and Graphics Tool
- Alarm Email Notification

Dimensions, Approximate: 6 3/8 in. wide x 4 7/64 in. high x 2.5 in. deep (16.2 cm wide x 10.5 cm high x 6.4 cm deep)

Application: Controller

Application Size: Up to 12 T7350H Thermostats

Operating Temperature Range: 32 F to 122 F (0 C to 50 C)

Operating Humidity Range (% RH): 5 to 95% RH, non-condensing

Shipping Temperature Range: 32 F to 140 F (0 C to 60 C)

Approvals:
- Canadian Standards Association: CSA C22.2 No. 205-M1983 Signal Equipment
- CE: Approved
- Federal Communications Commission: FCC part 15 Class A
- Underwriters Laboratories, Inc. UL 916, cUL listed

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>PX-4-H</td>
<td>HID Prox Card (34 Bit)</td>
<td>PROX Card</td>
</tr>
<tr>
<td>PX-KEY-H</td>
<td>HID Prox Key Fob (34 Bit)</td>
<td>PROX key fob</td>
</tr>
<tr>
<td>SEC-ENC-H-1</td>
<td>WEBS-AX Security Medium Enclosure</td>
<td>Enclosure</td>
</tr>
<tr>
<td>SEC-ENC-H-1NP</td>
<td>Medium enclosure without power supply</td>
<td>Enclosure</td>
</tr>
<tr>
<td>SEC-ENC-H-2</td>
<td>WEBS-AX Security Large Enclosure</td>
<td>Enclosure</td>
</tr>
<tr>
<td>SEC-ENC-H-2NP</td>
<td>Large enclosure without power supply</td>
<td>Enclosure</td>
</tr>
<tr>
<td>SEC-ENC-H-3</td>
<td>WEBS-AX Security Small Enclosure</td>
<td>Enclosure</td>
</tr>
<tr>
<td>SEC-H-INT-KP</td>
<td>Intrusion Keypad/Display for arming and disarming</td>
<td>Keypad</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Network Communications</th>
<th>Commissioning Software</th>
<th>Used With</th>
<th>Compatible with:</th>
<th>Includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>W7350A1000</td>
<td>LonWorks</td>
<td>WebStat</td>
<td>LonWorks bus</td>
<td>T7350H Communicating Thermostats</td>
<td>Lon Card and Power Supply</td>
</tr>
</tbody>
</table>
Spyder Programmable Controllers

The controllers are for use in VAV (Variable Air Volume) and Unitary HVAC control applications. Each controller communicates via LONWORKS® or BACnet MS/TP network communications. Each controller provides flexible, universal inputs for external sensors, digital inputs, and a combination of analog outputs and digital Triac outputs. The Sylk Bus is included in each controller which enables connection to other Sylk enabled devices. These controllers provide many options and advanced system features that allow state-of-the-art commercial building control. Each controller is programmable and configurable using the NIAGARA AX FRAMEWORK® software.

**Product Number** | **Application** | **Network Communications** | **I/O Count** | **Power Consumption** | **Operating Temperature Range** | **Includes**
--- | --- | --- | --- | --- | --- | ---
PUB6438S | Unitary | BACnet MS/TP | 6 UI, 4 DI, 3 AO, 8 DO | 5 VA | -40 C to 65.5 C | —
PUL1012S | Unitary | LonWorks | 1 UI, 0 DI, 1 AO, 2 DO | 5 VA | -40 C to 65.5 C | —
PUL4024S | Unitary | LonWorks | 4 UI, 0 DI, 2 AO, 4 DO | 5 VA | -40 C to 65.5 C | —
PUL6438S | Unitary | LonWorks | 6 UI, 4 DI, 3 AO, 8 DO | 5 VA | -40 C to 65.5 C | —
PVB6436AS | VAV | BACnet MS/TP | 6 UI, 4 DI, 3 AO, 6 DO | 9 VA | 0 C to 50 C | 32 F to 122 F | Integrated Actuator & Pressure Sensor
PVB6438NS | VAV | BACnet MS/TP | 6 UI, 4 DI, 3 AO, 8 DO | 5 VA | 0 C to 50 C | 32 F to 122 F | Onboard Pressure Sensor
PVL0000AS | VAV | LonWorks | 0 UI, 0 DI, 0 AO, 0 DO | 9 VA | 0 C to 50 C | 32 F to 122 F | Integrated Actuator & Pressure Sensor
PVL4022AS | VAV | LonWorks | 4 UI, 0 DI, 2 AO, 2 DO | 9 VA | 0 C to 50 C | 32 F to 122 F | Integrated Actuator & Pressure Sensor
PVL4024NS | VAV | LonWorks | 4 UI, 0 DI, 2 AO, 4 DO | 5 VA | 0 C to 50 C | 32 F to 122 F | Onboard Pressure Sensor
PVL6436AS | VAV | LonWorks | 6 UI, 4 DI, 3 AO, 6 DO | 9 VA | 0 C to 50 C | 32 F to 122 F | Integrated Actuator & Pressure Sensor
PVL6438NS | VAV | LonWorks | 6 UI, 4 DI, 3 AO, 8 DO | 5 VA | 0 C to 50 C | 32 F to 122 F | Onboard Pressure Sensor
WEB 403 Controller

The WC2003B WEB-403 bundles WEBs software capability in a hardware platform that can be installed in typical building control environments. Each WEB-403 connects to a system field bus and provides real-time control functions as constant streams of data from individual systems are instantaneously transformed to a common object model. The products provide a fully distributed system when multiple units are networked together, which provides unsurpassed scalability and reliability. In this configuration, WEBs can be used to network controllers and manage enterprise-level control functions. The appropriate model is determined by connectivity and computing power requirements.

- Embedded RISC Microprocessor platform.
- 128 MB RAM / 32 MB Flash
- One Lon FTT10A port for Lon device integration.
- Direct, on-board I/O with six universal inputs, and 4 digital relay outputs.
- One RS-485 port for connection to open and proprietary protocol devices.
- One RS-232 port for integration or support of an optional internal modem.
- Wind River VxWorks OS with Jeode Java Virtual Machine
- Niagara Control Engine
- Integral Web User Interface services to support many simultaneous users over the intranet or Internet via a standard browser.

Dimensions, Approximate: 11 in. wide x 14 in. high x 2 1/2 in. deep (28 cm wide x 36 cm high x 6 cm deep)
I/O Count: 4 Digital Output relays with LED indicators, 6 Universal Inputs
Voltage: 25 VA max
Frequency: 50 Hz; 60 Hz
Power Consumption: 120 Vac
Operating Temperature Range: 32 F to 122 F (0 C to 50 C)
Operating Humidity Range (% RH): 5 to 95% RH, non-condensing
Shipping Temperature Range: 32 F to 158 F (0 C to 70 C)
Used With: WEBs System
Includes: One 10/100 MB Ethernet port - RJ-45 connection, One RJ-45 connector for RS-232 port, One RS-485 port, One LonWorks port - FTT-10 with Weidmuller connector

Approvals:
- Canadian Standards Association: CSA C22.2 No. 205-M1983 Signal Equipment
- CE: Approved
- Federal Communications Commission: FCC part 15 Class A
- Underwriters Laboratories, Inc. UL 916, C-UL listed

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC2003B1022</td>
<td>Includes Web User Interface, license restricted to 27 node max.</td>
</tr>
<tr>
<td>WC2003B1048</td>
<td>Includes Web User Interface, 120 connected device (node) limit</td>
</tr>
</tbody>
</table>

WEB 545 Controller

Specifically designed for commercial applications, the WEB-545 is ideally suited for users who require a compact controller that can be wall or enclosure mounted. A single WEB-545 controller can support a network of devices via the LonWorks port and auxiliary devices that can be accessed directly via onboard I/O, or through the 4 RS-485 ports, or an RS-232 port (unless used by the optional internal modem). The WEB-545 can integrate any combination of LON®, Modbus, BACnet, or legacy devices with the appropriate optional drivers.

- Embedded RISC Microprocessor platform.
- Wind River VxWorks Operating System with Jeode Java Virtual Machine.
- Java Application Control Engine Software with I/O control objects.
- 128 MB RAM / 32 MB Flash
- One Lon FTT10A port for Lon device integration.
- Four RS-485 ports (electrically isolated) for connection to open and proprietary protocol devices.
- Two RS-232 port for Integration or support of an optional internal modem.
- Integral web UI services to support many simultaneous users over the intranet or Internet via a standard web browser (WEB-545-UI only).

Dimensions, Approximate: 11 in. wide x 14 in. high x 2 1/2 in. deep (28 cm wide x 36 cm high x 6 cm deep)
Voltage: 25 VA max
Frequency: 50 Hz; 60 Hz
Power Consumption: 120 Vac
Operating Temperature Range: 32 F to 122 F (0 C to 50 C)
Operating Humidity Range (% RH): 5 to 95% RH, non-condensing
Shipping Temperature Range: 32 F to 158 F (0 C to 70 C)
Used With: WEBs System
Includes: One 10/100 MB Ethernet port - RJ-45 connection, two RJ-45 connectors for RS-232 port, four RS-485 ports, one LonWorks port - FTT-10

Approvals:
- Canadian Standards Association: CSA C22.2 No. 205-M1983 Signal Equipment
- CE: Approved
- Federal Communications Commission: FCC part 15 Class A
- Underwriters Laboratories, Inc. UL 916, C-UL listed

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC2003A2005</td>
<td>—</td>
</tr>
<tr>
<td>WC2003B2004</td>
<td>Includes Web User Interface software</td>
</tr>
</tbody>
</table>
## WEBs-R2 System

### WEBs R2 Platform - Workstations and Tools

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZW2000A1003</td>
<td>WEBStation Software WS-1 and first copy of WEBPro Software: for a single JACE</td>
<td></td>
</tr>
<tr>
<td>ZW2000B1002</td>
<td>WEBStation Software; additional node</td>
<td></td>
</tr>
<tr>
<td>ZW2000C1001</td>
<td>WEBStation Software and 20 pack of node software keys.</td>
<td></td>
</tr>
<tr>
<td>ZW2000D1000</td>
<td>WEBStation Software and 50 pack of node software keys.</td>
<td></td>
</tr>
<tr>
<td>ZW2001A1001</td>
<td>Additional copies of WEBPro Software - per copy</td>
<td></td>
</tr>
</tbody>
</table>

### WEBs R2 Platform - Accessories

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>32005192-016</td>
<td>BACNET MSTP Driver</td>
<td>WEBs System</td>
</tr>
<tr>
<td>32005192-021</td>
<td>Tenant Billing Service. Runs on any Web Supervisor.</td>
<td>WEBs System</td>
</tr>
<tr>
<td>LIC-CHG</td>
<td>License Change Fee for WEBStation-AX Supervisor</td>
<td>WEBs AX Platform</td>
</tr>
<tr>
<td>WC2003B1055</td>
<td>WEB 403 EXUP - node expansion license; from 27 up to 120 nodes</td>
<td>WEBs System</td>
</tr>
<tr>
<td>ZW2002A1009</td>
<td>Modbus Driver for WEB controller</td>
<td>WEBs System</td>
</tr>
</tbody>
</table>
Light Commercial Building Systems

Light Commercial Building Systems Architecture

- INTRANET
- EXCEL 15B BUILDING MANAGER
- ETHERNET TCP/IP
- LONWORKS BUS
- RAPIDLINK
- EXCEL 15A BUILDING MANAGER
- COMMAND DISPLAY
- ZONE CONTROLLERS
  - VAV BOX CONTROLLER W7751
  - FAN COIL UNIT CONTROLLER W7752
  - COMMUNICATING THERMOSTAT T7350H
  - CONSTANT VOLUME AHU CONTROLLER W7750
  - UNIT VENTILATOR CONTROLLER W7753
  - REMOTE INPUT/OUTPUT DEVICE W7761
  - HYDRONIC CONTROLLER W7762/3

- RAPIDZONE™
  - ZONE CONTROLLER
  - EXCEL 15C PLANT CONTROLLER

A THE SYSTEM ONLY REQUIRES THE EXCEL 15B BUILDING MANAGER OR THE EXCEL 15A BUILDING MANAGER.
**Light Commercial Building Systems**

**LonSpec Configuration Software**

Excel LONSPEC is a windows based software application for the configuration, commissioning, check out, and monitoring of the Light Commercial Building Solution (LCBS). The LCBS includes the Excel 15A Building Manager, Excel 15C Plant Controller, Excel 10 Constant Volume Air Handling Unit (CVAHU), Excel 10 Variable Volume Air Handling Unit (VAV), Remote Input/Output (RO) device, and Unit Vent (UV), Excel 15 Command Display (CD), the T7300F/Q7300H Series 2000 Commercial Thermostats with Communicating Subbases, and T750H Communication Thermostat, Q7790A Wireless LonWorks® Receiver with T7790C Wireless Wall Module and Honeywell Variable Frequency Drive.

- Easy-to-use drag-and-drop setup of LONWORKS® Networks and devices.
- Excel 10 application-specific controllers come pre-configured to the most common settings, yet allow quick modifications of parameters for your application.
- Easy and intuitive configuration of entire control loops.
- No line-by-line programming needed.

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>System Requirements</th>
<th>Used With</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZL7760A1012</td>
<td>LonSpec for Windows 2000 and XP</td>
<td>16 MB RAM, 40 MB disk drive, 90MHz Pentium microprocessor, Microsoft Windows 2000 or XP</td>
<td>T7300F/Q7300H Thermostat/Subbase, Excel 10 family of controllers, Excel 15 family of controllers</td>
</tr>
<tr>
<td>ZL7760A1020</td>
<td>LonSpec - Software 5.1.0</td>
<td>128 MB RAM, 100 MB disk drive, 500 MHz microprocessor, Microsoft Windows 2000 or XP</td>
<td>—</td>
</tr>
</tbody>
</table>

**LonStation Software**

LONSTATION. Software is a Windows® based application / PC workstation used for monitoring and managing the Light Commercial Building Solution (LCBS) controllers.

- Easy-to-use drag and drop setup of LonWorks networks and devices.

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Commissioning Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZL7762A1026</td>
<td>LonStation - Software 5.1.0</td>
<td>LonSpec</td>
</tr>
</tbody>
</table>

**RapidZone Software**

The RapidZone Solution configures constant volume single zone HVAC equipment and a series of dampers to maintain the desired temperature for up to 18 separate zones per roof top unit (RTU). Each project can have up to 50 RTU subsystems. Each zone is capable of having an adjustable setpoint, a programmable time-of-day schedule for each day of the week, and an independent unoccupied override input. The system satisfies the space temperature setpoints by first reading the space temperature deviation from setpoint for each zone, then energizing heating or cooling in the HVAC unit and controlling the position of a supply damper ducted to each zone. Individual zone dampers modulate open and closed based on the zone temperature versus setpoint and the temperature of the RTU discharge air (heating or cooling).

- The fastest way to a commercial zoning system.
- Configure and commission an average multiple Rooftop unit job in less then 60 minutes.
- Ease of use allows a Controls "Novice" to successfully configure a commercial zoning system.
- Produces customized wiring diagrams that clearly define the wiring of every controller input and output.
- This reduces installation mistakes in the field and improves ease of future trouble-shooting.
- Flexibility to configure up to 10 different Rooftop systems with up to 18 zones per Rooftop unit, and up to 40 single-zone controllers.
- Roll over help text aids users in the configuration process.
- Ability to replicate similar Rooftop systems and/or Zones simplifies configuration process.
- Gives a complete materials checklist after the configuration process is completed.

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>System Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZL7751A1029</td>
<td>RapidZone 3.0</td>
<td>16 MB RAM, 40 MB disk drive, 90MHz Pentium microprocessor, Microsoft Windows 2000 or XP</td>
</tr>
</tbody>
</table>
**Q7770 RapidLink**

The Excel 10 Q7770A RapidLink device is a complete network interface unit for a FTT LonWorks® Bus network. RapidLink is equipped with an on-board modem that eliminates the requirement for an on-site modem for remote connections. The Q7770A uses 9 to 24 Vac or Vdc, 9 Vdc power supply using removable screw terminals or a 9 Vdc barrel connector. A connector cable attaches the Q7770A to the LonWorks-Bus port on Excel 10 controllers or wall modules.

- High performance communications protocol provides for faster communication of data to your LonWorks network.
- Fixed 115,200 bits per second (bps) serial bit rate with auto-baud detection.
- Uses LonTalk® LonWorks® network protocol.
- 9 to 24 Vac or Vdc power input using removable screw terminals or a 9 Vdc barrel connector.
- Color-coded, removable screw terminals for network and power wiring.

**Building Management Interface:** LonWorks Bus

**Application:** Accessory or Replacement Part

**Network Communications:** LonWorks Bus

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Commissioning Software</th>
<th>Operating Temperature Range (°C)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7770A1001</td>
<td>RapidLink Dial Up Network Adapter</td>
<td>—</td>
<td>0°C to 38°C 32°F to 100°F</td>
<td>Transceiver Type: Transformer isolated, differential Manchester transceiver Display Two service LEDs indicate service request information for each segment; Status LED indicates when network traffic is occurring.</td>
</tr>
<tr>
<td>50000591-001</td>
<td>RapidLink Accessory Kit (U.S.)</td>
<td>LCBS</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**W7760A Excel 15 Controller**

The Excel 15 W7760A Building Manager is a LonMark® compliant device that can be used to monitor and control HVAC equipment and other miscellaneous loads in a distributed network. The optional lithium battery (not included, purchased locally) allows continuous power so trend logs and alarms can be maintained for up to four continuous years. The W7760A Building Manager communicates via the 78 kilobaud Echelon® LonWorks® Network, using a free topology transceiver (FTT).

- Programmable control of mechanical equipment and auxiliary points.
- Configurable inputs/outputs are expandable with up to three Excel 10 Remote Input/Output (RIO) devices.
- 6 General Purpose Configurable (PID) Control Loops.
- 6 General Purpose Configurable (Non-Linear) Control Loops.
- 8 Start/Stop Control Loops (max of 6 events per day).
- Easy Programming the LonSpec™ Software: Two piece construction for easy installation.
- Easy access to all I/O points for checkout while operations.
- LonTalk® Network communication protocol.
- LonWorks® Free Topology Transceiver (FTT).
- Adaptive Intelligent Recovery.
- Set-Point reset.
- Remote Equipment Monitoring and Control.

- 8 schedules of five different occupancy states (when used with a W7760A Building Manager).
- Demand Limit Control (from a W7760 Building Manager).

**Dimensions, Approximate:** 6 5/32 in. high x 10 19/32 in. wide x 3 7/32 in. deep (156 mm high x 259 mm wide x 82 mm deep)

**Application:** Heat Pump Systems; Boiler; Chiller; Packaged RTU; Built-up AHU

<table>
<thead>
<tr>
<th>Product Number</th>
<th>I/O Count</th>
<th>Output Type</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>W7760A2011</td>
<td>4 Digital Inputs, 8 Analog Inputs, 8 Digital Outputs, 2 Analog Outputs</td>
<td>Analog/Modulating, Staged On/Off, Floating, Pulse Width Modulation</td>
<td>Can also be used to provide time-keeping abilities to the Excel 15C</td>
</tr>
</tbody>
</table>

**Appendix:**

**Commissioning Software**

**Operating Temperature Range**

**Comments**

**Application Size:** 20 Nodes

**Building Management Interface:** LonStation

**Network Communications:** LonWorks Bus

**Commissioning Software:** RapidZone; LonSpec

**Frequency:** 50 Hz; 60 Hz

**Power Consumption:** 20 VA (with no digital outputs), 100 VA (with digital outputs)

**Operating Temperature Range:** 32°F to 113°F (0°C to 45°C)

**Shipping Temperature Range:** -4°F to +158°F (-20°C to +50°C)

**Used With:** S7760A Command Display, LonWorks bus

**Approvals:**

**CE:** Conforms to European Consortium standards

**Federal Communications Commission:** FCC Listed Part 15 Subpart J, Class A

**Underwriters Laboratories, Inc.** UL and cUL listed UL916 as a Class 2 device
Light Commercial Building Systems

W7760B Excel 15 Controller

The Excel 15 W7760B Building Manager is a Light Commercial Building Solution (LCBS) operator interface (network server) and LONWORKS® Bus supervisory device. As an operator interface, it connects the user to the Internet, local area network (LAN), or wide area network (WAN) providing multi-user access to web pages for Building Manager configuration and LCBS monitoring and command functions. As a building manager, it uses LONWORKS® to provide network wide alarm handling, scheduling, and trend logging for application specific XL10 controllers and Excel 15 W7760C Plant controllers. The W7760B is a network server/appliance equipped with a hard drive. The use of a hard drive greatly expands alarm handling, scheduling, and logging capabilities when compared to EPROM/RAM based control devices. The W7760B is configured using built-in utilities. It queries the LONWORKS® network to determine the devices installed and self-configures display pages for each supported device.

- Internet Network appliance with hard drive.
- Supports up to 120 Excel 10 and Excel 15 W7760C controllers.
- Self-discovery of devices (nodes) on the LONWORKS® network.
- Automatically creates a Device Status List (DSL).
- Automatically creates display pages for each supported device.
- Automatically configures Trends Log for supported Excel 10 and Excel 15 W7760C controller.
- Up to 100 user configured Trend Logs.
- Scheduling of Excel 10 devices and Excel 15 W7760C objects.
- Reports and logs alarm data.
- E-mails reports of alarm data.
- View Excel 10 and Excel 15 W7760C data, modify setpoints and command Occupied bypass.
- Real Time Clock (RTC) for time stamping with time synchronization.
- Multi-user access.

Dimensions, Approximate: 6 5/32 in. high x 10 19/32 in. wide x 3 7/32 in. deep (156 mm high x 259 mm wide x 82 mm deep)
Application: Heat Pump Systems; Boiler; Chiller; Packaged RTU; Built-up AHU

W7760C Excel 15 Controller

The Excel 15 W7760C Plant Controller is used to monitor and control HVAC equipment and other miscellaneous loads in a distributed network. The W7760C Plant Controller communicates via the 78 kilobaud LonWorks Network, using a free topology transceiver (FTT).

- Configurable inputs/outputs are expandable with up to three Excel 10 Remote Input/Output (RIO) devices.
- Eight digital inputs, eight analog inputs.
- Eight optically isolated digital outputs, six 0-20 mA analog outputs.
- Easy programming with LonSpec software.
- Two-piece construction.
- Easy access to all I/O point for check-out while operational.
- LonTalk Network communication protocol.
- LonWorks Free Topology Transceiver (FTT).
- Programmable control of mechanical equipment and auxiliary points.
- Used for timekeeping abilities to the Excel 15C

Dimensions, Approximate: 7 1/2 in. high x 5 1/4 in. wide x 1 15/16 in. deep (191 mm high x 133 mm wide x 49 mm deep)
Application: Heat Pump Systems; Boiler; Chiller; Packaged RTU; Built-up AHU

<table>
<thead>
<tr>
<th>Product Number</th>
<th>System Requirements</th>
<th>Output Type</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>W7760B2001</td>
<td>Internet Explorer 5.5 or higher</td>
<td>Staged On/Off, Graphical Interface, Floating, Pulse Width Modulation, Analog/Modulating</td>
<td>Can also be used to provide timekeeping abilities to the Excel 15C</td>
</tr>
</tbody>
</table>

Product Number I/O Count Output Type Comments
W7760C2017 8 Analog Inputs, 6 Analog Outputs, 8 Digital Inputs, 8 Digital Outputs Analog/Modulating, Pulse Width Modulation, Staged On/Off Designed to be used with the Light Commercial building solution. Requires a W7760A be connected to the LonWorks bus in order to have scheduling information

Underwriters Laboratories, Inc. UL and cUL listed UL916 as a Class 2 device

Federal Communications Commission: FCC Listed: Part 15 Subpart J, Class A

UL and cUL listed UL916 (E14480)

Federal Communications Commission: FCC Listed Part 15 Subpart J, Class A

Underwriters Laboratories, Inc. UL and cUL listed UL916 as a Class 2 device
S7760 Excel 15 Command Display

The S7760A Command Display provides local display of system variables and alarms in a LonWorks® network. The S7760A Command Display also allows the user to modify setpoints, schedules and basic system parameters and acknowledge alarms. Multi-level password protection prevents unauthorized access. Easy navigation between building and room views allow users to easily perform the most common tasks.

- Attractive wall-mount packaging.
- Backlit LCD display; 8 lines high by 40 characters wide.
- Two-piece construction for easy installation.
- 10-key keypad for menu-item selection.
- Audible beep when keys are pressed.
- Several layers of display screens provide different views: Buildings, Rooms, Schedules and Setpoints.
- Local display allows setpoint and schedule changes and alarm acknowledgment. Password protected with View Only, Bypass, Setpoint and Schedule levels.

W7750 Constant Volume Air Handling Unit

The W7750A, B, C are LonMark® compliant Constant Volume Air Handling Unit Controllers used to control single zone and heat pump air handlers.

- High side triac switching (B and C only).
- Freezestat protection for HVAC equipment (B and C only).
- Analog outputs (C only).
- Factory configured via EEPROM with critical user parameter default values.
- Uses LonTalk® network (E-Bus) communications protocol.
- High-speed 78 kilobit communications network.
- Conforms with Echelon® LonMark® HVAC Interoperability standard for Roof Top Unit controllers (profile number B030).
- Free Topology Transceiver (FTT) network technology is insensitive to polarity, simplifying installation.
- Capable of stand-alone operation and has enhanced features available when using the E-Bus network communications.
- Designed for both staged heating/cooling control and modulating heating/cooling control.
- Uses either Series 60 Floating Control or PWM (W7750B only) providing modulating control for heating/cooling equipment.
- Supports two types of economizer control: modulating control and enable/disable control.
- Provides Proportional Integral Derivative (PID) temperature control.
- Uses an adaptive algorithm (patent pending) that continuously adjusts the discharge air setpoint as needed (W7750B only).
- Motion sensor interface for enhanced energy savings.
- Window sensor input for additional energy savings.

Dimensions, Approximate: 5 5/8 in. high x 6 in. wide x 2 1/8 in. deep
(143 mm high x 152 mm wide x 54 mm deep)

Application: Heat Pump Systems; Packaged RTU
Application Size: 3 Heat / 3 Cool
Commissioning Software: LNS Plug-in; RapidZone LonSpec; CARE
Network Communications: LonWorks Bus
Contact Ratings: 7.5 A inrush @ 24 Vac; 1.5 A Run @ 24 Vac
Output Type: Staged On/Off, Floating, Pulse Width Modulation
Voltage: 24 Vac
Frequency: 50 Hz; 60 Hz
Operating Temperature Range: -40 F to +150 F (-40 C to +66 C)
Operating Humidity Range (% RH): 5 to 95% RH, non-condensing
Setpoint Temperature Range: 45 F to 99 F (7 C to 37 C)
Shipping Temperature Range: -40 F to +150 F (-40 C to +65 C)
Used With: See Application Selection Guide (63-7046)

Approvals:
- CE: CE Mark; Conforms to EN50081-1 (CISPR 22 Class B) and EN50082-1
- Federal Communications Commission: Meets FCC part 15 Class B requirements
- Underwriters Laboratories, Inc. UL 916 (E7741) and cUL (E87741)

<table>
<thead>
<tr>
<th>Product Number</th>
<th>I/O Count</th>
<th>Power Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>W7750A2005</td>
<td>6 Digital Outputs (relay), 3 Analog Inputs, 3 Digital Inputs</td>
<td>6 VA</td>
</tr>
<tr>
<td>W7750B2011</td>
<td>6 Analog Inputs, 5 Digital Inputs, 8 Digital Outputs (triac)</td>
<td>12 VA</td>
</tr>
<tr>
<td>W7750C2001</td>
<td>3 Analog Outputs, 6 Analog Inputs, 5 Digital Inputs, 5 Digital Outputs (triac)</td>
<td>12 VA</td>
</tr>
</tbody>
</table>
Light Commercial Building Systems

W7751 Variable Air Volume Controllers

The W7751B,D and F are VAV II Controllers in the Excel 10 family product line. These VAV controllers provide pressure independent or pressure dependent air flow control and series and parallel (induction) fan control using single and dual duct applications. VAV systems generally provide cool air only to the zones. The W7751 controllers provide additional outputs that control VAV box reheat coils. The heaters can be staged electric or modulating hot water. Supply and exhaust pressurization control are provided on a zone basis. W7751H and J Smart VAV Actuator are factory-integrated VAV Box Controllers with a 90 second ML6161B Direct-Coupled Actuator in the Excel 10 family product line.

- Uses Echelon® LonWorks® protocol.
- W7751B,D,F use Free Topology Transceiver (FTT) networks and are Compatible with: LonMark® profile.
- Energy saving setpoint reset for electrical demand limit control.
- Actuator included with W7751H mounts directly onto VAV box damper shaft and has up to 35 lb. in. torque, 90 degrees stroke, and 90 sec.

**Application:** VAV Terminal Box

**Commissioning Software:** LNS Plug-in; RapidZone LonSpec; CARE Network Communications: LonWorks Bus

**Voltage:** 24 Vac with a valid range of 20 to 30 Vac

**Frequency:** 50 Hz; 60 Hz

**Output Type:** Pulse Width Modulation, Floating, Staged On/Off

**Operating Temperature Range:** 32 F to 125 F (0 C to 51.66 C)

**Operating Humidity Range (% RH):** 5 to 95% RH, non-condensing

**Setpoint Temperature Range:** 45 F to 99 F (7 to 37 C)

**Power Consumption** | **Comments** | **Includes**
--- | --- | ---
W7751B2010 | Excel 10 VAV II Controller Printed Wiring Board | 10 VA | Mountable on Snaptrack, has UUKL approval for use on fire systems |
W7751D2016 | Excel 10 VAV II Controller | 10 VA | Internally wired subbase, UUKL approval for use on fire systems |
W7751F2011 | Excel 10 VAV II Controller | 10 VA | Externally wired subbase, UUKL approval for use on fire systems |
W7751H2025 | Excel 10 Smart VAV Actuator | 6 VA | UUKL approval for use on fire systems |
W7751J2004 | Excel 10 Smart VAV Actuator | 6 VA | Does not have pressure sensor, supports pressure dependent only |

Y7751- W7751F VAV Unit Controller and ML6161B Actuator

The W7751F2003 VAV II Controller is from the Excel 10 family product line. VAV controllers provide pressure independent or pressure dependent air flow control and series and parallel (induction) fan control using single and dual applications. The W7751F controllers provide additional outputs that control VAV box reheat coils. The ML6161B2024 is used to control dampers in VAV terminal units and for mounting on ball valves.

- Uses Echelon LonWorks Protocol.
- High Speed 78 kilobit communications network.
- Easy user-access to the network communications jack.
- Easy user-access to the airflow sensor inputs.
- Provides Proportional Integral Derivative (PID) temperature control.

**Application:** VAV Controller with FFT base with enclosure and outward facing terminal strips

**Building Management Interface:** EBI; SymmetrE; ACSELON

**Commissioning Software:** LNS Plug-in; RapidZone; LonSpec; CARE Network Communications: LonWorks Bus

**Shipping Temperature Range:** -40 F to 150 F (-40 C to 65 C)

**Compatible with:** See Application Selection Guide (63-7045)

**Approvals:**
- Canadian Standards Association: Canadian Standards Association Listed: File number LR95329-3
- Federal Communications Commission: Meets FCC part 15 Class A requirements
- Underwriters Laboratories, Inc. File number E87741

**Product Number** | **Description** | **Includes**
--- | --- | ---
Y7751F2001 | Package containing a W7751F VAV Controller and a ML6161 Actuator | One W7751F 2003 and one ML6161B 2024
W7752 Fan Coil Unit Controllers

The W7752 Fan Coil Unit Controllers provide room temperature control for two and four pipe fan coil units with optional electric heating coils and can control single, two or three speed fans. Timing and inter-lock features make the W7752 suitable for systems using electric heat and compressors.

• LonMark® Fan Coil Unit HVAC profile #8020.

Dimensions, Approximate: 4 1/8 in. high x 10 1/8 in. wide x 2 1/2 in. deep (101 mm high x 257 mm wide x 60 mm deep)

Application: Fan Coil Unit

Application Size: 3 Heat / 3 Cool; 2-pipe; 4-pipe

Commissioning Software: LNS Plug-in; RapidZone; LonSpec; CARE

Network Communications: LonWorks Bus

Voltage: 115 Vac (+10%, -15%)

Frequency: 50 Hz; 60 Hz

Power Consumption: 30 VA maximum

Output Type: Staged On/Off, Floating, Pulse Width Modulation

W7753 Unit Vent Controllers

W7753A is a direct digital controller for unit ventilators with staged, floating, or pulse width modulation output using pre-programmed heating, cooling, economizer, and ASHRAE cycles I, II, or III algorithms.

• Uses standard Echelon® LonMark Unit Ventilator functional profile for openness and interoperability with Lon Mark devices.

• Applications include unit ventilators with up to two stages heat/cool; floating heat/cool/economizer, pulse width modulating (PWM) heat/cool/economizer; ASHRAE Cycles I, II, III.

• Two unused digital outputs can be used as free points controlled by the network for lighting, exhaust fan.

• Can be used for indoor air quality control using an external sensor/control and economizer minimum position reset.

• Provides optional energy-saving setpoints for heating/cooling in unoccupied/occupied and standby modes.

• Optional control sequence shutdown via window/door open digital input.

• On-board network jacks for quick commissioning and troubleshooting using the E-Vision configuration tool.

• On-board status LED.

• Free topology transceiver (FTT) for flexible installation.

• UL94-5V flame-retardant construction.

Dimensions, Approximate: 5 5/8 in. high x 6 in. wide x 2 1/8 in. deep (143 mm high x 152 mm wide x 54 mm deep)

Application: Unit Ventilator

Application Size: 2 Heat / 2 Cool

Network Communications: LonWorks Bus

Frequency: 50 Hz; 60 Hz

Power Consumption: 6 VA

Setpoint Temperature Range: 55 F to 85 F (13 C to 29 C)

Shipping Temperature Range: -40 F to +150 F (-40 C to +65 C)

Used With: See Application Selection Guide (63-7043)

Approvals:

Federal Communications Commission: Meets FCC part 15 class B requirements

Underwriters Laboratories, Inc. UL 916

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Commissioning Software</th>
<th>I/O Count</th>
<th>Output Type</th>
<th>Comments</th>
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<tbody>
<tr>
<td>W7753A2002</td>
<td>LNS Plug-in; RapidZone; Lon Spec; CARE</td>
<td>8 Digital Outputs (triac), 2 Analog Inputs (resistive), 2 Analog Inputs (voltage), 4 Digital Inputs</td>
<td>Staged On/Off, Floating, Pulse Width Modulation</td>
<td>One T7770 wall module input</td>
</tr>
</tbody>
</table>
**W7761 Remote Input/Output Device**

The W7761 extends the distribution of input and output devices across an Echelon network. Each input/output is individually controlled from the Zone Manager. Uses Echelon LonTalk® communication protocol. Free topology transceiver (FTT) for flexible installation. On-board network jacks. On-board status LED. Flame retardant construction (UL94-V5 rated).

Dimensions, Approximate: 5 5/8 in. high x 6 in. wide x 2 1/8 in. deep (143 mm high x 152 mm wide x 54 mm deep)

Application: Remote I/O

<table>
<thead>
<tr>
<th>Product Number</th>
<th>I/O Count</th>
<th>Output Type</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>W7761A2010</td>
<td>2 Analog Inputs (voltage), 4 Analog Inputs (resistive), 4 Digital Inputs, 8 Digital Outputs (triac)</td>
<td>Staged On/Off, Floating, Pulse Width Modulation</td>
<td>UUKL approval for use on fire systems</td>
</tr>
</tbody>
</table>

**W7762; W7763 Hydronic Controller**

The W7763 Hydronic controllers cover a wide range of control applications including radiators, induction units, fan coil units with manual fan switching, and simple VAV. They are suitable for unit mounting or wall mounting. Controllers operate standalone or as a part of a LonWorks bus network. Has connections for humidity sensor and chilled water temperature sensor. Includes temperature setpoint knob, internal sensor, and bypass button. High efficiency, low cost Heat/Cool valve application solution. Model with integrated or remote wall module LonWorks Open protocol: flexibility now and for the future.

- LonMark profile #8020.
- Direct connection of thermal actuators.
- Wide range of supported valves and actuators.

Dimensions, Approximate: 3 5/32 in. high x 4 11/32 in. wide x 1 21/32 in. deep (80 mm high x 110 mm wide x 42 mm deep)

Application: Hydronic Controller

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Commissioning Software</th>
<th>Output Type</th>
<th>Comments</th>
<th>Includes</th>
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</thead>
<tbody>
<tr>
<td>W7762B1027</td>
<td>LNS Plug-in; RapidZone; LonSpec; CARE</td>
<td>Multi-stage Electric, Pulse Width Modulation, Floating, Staged On/Off</td>
<td>2 inputs and 2 control outputs</td>
<td>—</td>
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<tr>
<td>W7763C1016</td>
<td>LNS Plug-in; RapidZone; LonSpec; CARE</td>
<td>Floating, Pulse Width Modulation, Staged On/Off, Multi-stage Electric</td>
<td>3 Inputs, 2 Control Outputs</td>
<td>An integral setpoint knob, sensor, bypass button, and LED</td>
</tr>
<tr>
<td>W7763C1032</td>
<td>LNS Plug-in; CARE</td>
<td>Floating, Pulse Width Modulation, Staged On/Off, Multi-stage Electric</td>
<td>Relative Setpoint Adjustment</td>
<td>An integral setpoint knob, sensor, bypass button, and LED</td>
</tr>
</tbody>
</table>
Honeywell

AUTOMATION AND CONTROL PRODUCTS

WARRANTY POLICY

Honeywell warrants the products in this catalog (except those parts designated on Honeywell's price lists as not covered by this warranty) to be free from defects due to workmanship or materials, under normal use and service, for the following warranty periods. Honeywell VisionPRO™, Commercial VisionPRO™, FocusPRO®, PRO 4000, PRO 3000, LineVolt™ PRO, Digital Round™, and Modem Round™ (T87K, N) Series Thermostats with a date code of 0501 or later: sixty (60) months from date of installation. CommercialPRO, PRO 2000 and PRO 1000 thermostats: twenty-four (24) months from date of installation. AUBE branded thermostats, timers, and switches: thirty-six (36) months from date of installation. All other Honeywell thermostat and humidifiers, Ventilators, Ultraviolet Treatment and Zoning Products with a date code of 0501 or later, excluding replacement maintenance parts: sixty (60) months from date of installation. Indoor air quality parts F50, F52, F300, F200, F150, UV100E, HE225, HE265, HE365, with date codes of 0452 or earlier, excluding replacement maintenance parts: sixty (60) months from date of installation. All other Honeywell indoor air quality and zoning products with a date code of 0452 or earlier: twenty-four (24) months from date of installation, unless specified otherwise. Variable frequency drive devices (VFD) and accessories: new products for thirty-six (36) months and factory refurbished drives for twelve (12) months from date of installation when start-up and commissioning is performed by Honeywell VFD Authorized and trained personnel. All VFD warranty return products must have prior authorization (Form No. 87-0284) and be returned only to the VFD Service Center in Chattanooga, TN. MS, MN and Fact Acting 2-position Direct Coupled Actuators: sixty (60) months from date of installation. The warranty period for all other products is twelve (12) months from date of installation.

If a product is defective due to workmanship or materials, is removed within the applicable warranty period, and is returned to Honeywell in accordance with the procedure described below, Honeywell will, at its option, either repair, replace or credit the customer for the purchase price of the product, in accordance with the procedure described below. This warranty extends only to persons or organizations who purchase products in this catalog for resale.

The expressed warranty above constitutes the entire warranty of Honeywell with respect to the products in this catalog and IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL HONEYWELL BE RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER.

INSTRUCTIONS—INSTALLING OR SERVICING CONTRACTOR OR DEALER

When replacing a Honeywell product under warranty, including those products furnished on original heating and/or cooling equipment, you should rely on your local Honeywell Wholesaler or Distributor for prompt and efficient product replacement service.

A Honeywell Returned Goods Identification Tag (form 87-0300) or an electronic data notification system must be completed and approved by the servicing dealer/contractor prior to submitting the product to the Honeywell Wholesaler or Distributor. (Tags may be obtained from the Wholesaler or Distributor in advance.) No warranty claim for product replacement or credit will be honored by the Wholesaler/Distributor without a completed warranty tag attached or electronic notification.

INSTRUCTIONS—WHOLESALER OR DISTRIBUTOR

The following will apply to the return of any product to Honeywell under this warranty:

Any products which are not variable frequency drives and are:

(i) identified with Honeywell’s Returned Goods Identification Tag (form 87-0300), or electronic notification system;

(ii) are listed individually with Returned Goods ID Tag numbers and date codes listed on Honeywell’s Returned Goods Order (form 71-96024) or a similar form;

(iii) packed separately from other returns and protected from shipping damage;

(iv) have certification by the installer or servicing dealer that the product was removed, due to failure, within the applicable warranty period;

(v) are received transportation pre-paid at: Honeywell Return Goods Dock 4 MN10-3860 1885 Douglas Drive Golden Valley, MN 55422

(vi) and are found by Honeywell’s inspection to be defective in workmanship or materials under normal use and service will be handled in accordance with one of the following procedures, as specified by the customer making the return:

All VFD warranty return products must have prior authorization (Form No. 87-0284) and be returned only to the VFD Service Center in Chattanooga, TN.

1. CREDIT PROCEDURE. Honeywell will issue a credit, at Honeywell’s lowest wholesaler net price in effect at the time of the return (as set forth on Honeywell’s then current price sheet) or at the actual invoice amount if a copy of that invoice is attached to the packing list. (TRADELINE Replacement Exchange Products will be at Honeywell’s lowest replacement exchange net price in effect at the time of such return, as shown on Honeywell’s then current price sheet.) Honeywell reserves the right to disallow this credit option in cases of warranty abuse.

2. REPAIR OR REPLACEMENT PROCEDURE. Honeywell will, at its option, either repair or replace the product free of charge and return it or its replacement lowest cost transportation prepaid. The replacement will be a functionally equivalent new TRADELINE product. Premium transportation will be used at customer’s request and expense.

The warranty will not be honored if:

(i) product is damaged or missing parts or accessory items including batteries.

(ii) product exhibits evidence of field misapplications.

Final disposition of any warranty claim will be determined solely by Honeywell. If inspection by Honeywell does not disclose any defect covered by the warranty, the product will be returned or scrapped as instructed by the customer and Honeywell’s regular service charges will apply. Products returned to the customer may be sent shipping charges collect.

If you have any questions relative to product returns to Honeywell, contact your Customer Care Representative:

Honeywell International Inc. Customer Care MN10-1461 1985 Douglas Drive Golden Valley, MN 55422 (763) 954-5720

SPECIAL MESSAGE TO INDUSTRIAL USERS AND BUILDING OWNERS

Thank you for using Honeywell products.

As a user, when you purchase a Honeywell product from this catalog you should expect performance from the product and, if it fails, replacement of the product by the installing dealer.

Typically, you will have purchased a Honeywell product under the following circumstances:

1. To terminate or refurbish your existing commercial and/or process control system.

2. You have purchased new commercial and/or process heating, cooling, air cleaning or humidification equipment that is furnished with Honeywell controls or components (refer to your owner’s manual furnished with the equipment).

A control has failed on your existing commercial and/or process heating and/or cooling equipment and is replaced by a Honeywell TRADELINE product.

With few exceptions, you utilize the services of a competent plumbing, heating and/or cooling equipment contractor for new or replacement work performed.

Although our warranty does not extend to you, Honeywell does extend a warranty to your supplier.

Your supplier can rely on its local Honeywell Wholesaler/Distributor or Honeywell for prompt replacement.

If you have any questions, need additional information or would like to comment on Honeywell’s products or services, please write or phone:

Honeywell International Inc. Customer Care MN10-1461 1985 Douglas Drive North Golden Valley, MN 55422-4386 (763) 954-5720 or check your telephone directory (white pages) for one of many Honeywell field sales offices.