

# WEBS-AX 602 Express

WEB-602-XPR/WEB-602-XPR-GW

## PRODUCT DATA



## PRODUCT DESCRIPTION

Honeywell's WEB-602-XPR(GW) is an embedded controller and server platform designed for remote monitoring and control applications. Save labor and space with the WEBS-AX 602 Express – this powerful controller is pre-mounted in a compact enclosure that's designed for finished space or mechanical room mounting with 16 points of on-board I/O and an integral power supply. The unit combines integrated control, supervision, data logging, alarming, scheduling, network management functions, and a Graphical User Interface on a powerful, reliable platform.

The WEB-602-XPR is part of Honeywell's portfolio of products, software applications, and tools, designed to integrate a variety of devices and protocols into unified, distributed systems. Honeywell's WEBS-AX products are powered by the Niagara<sup>AX</sup> Framework<sup>®</sup>, the industry's leading software technology that integrates diverse systems and devices into a seamless system. Niagara<sup>AX</sup> supports a range of protocols including LonWorks<sup>®</sup>, BACnet<sup>®</sup>, Modbus, oBIX and many Internet standards. The Niagara<sup>AX</sup> Framework also includes integrated management tools to support the design, configuration and maintenance of a unified, real-time controls network.

## APPLICATION

For smaller facilities, the WEB-602-XPR is an ideal solution – this powerful platform with its embedded user interface, rich graphical displays, and on-board IO is all that's needed to handle the control, monitoring, and energy applications of a small to medium sized facility. The system may be accessed via an Ethernet LAN or remotely from anywhere over the Internet.

For medium to large facilities, multi-site applications, or large scale control applications, the WEB-602-XPR is ideal for providing the distributed control and monitoring required for reliable operation of a large scale system. For sites with multiple WEBS-AX controllers, the WEBS-AX Supervisor may be used to aggregate data from multiple sites and controllers, manage global control functions, monitor energy usage, support multiple networks, and host multiple client connections for a single unified system presentation.

On-board inputs and outputs facilitate local control near the controller location. Remote monitoring and control may be accomplished by installing up to fifteen remote input / output modules interfaced via the controller's RS-485 port.

The WEB-602-XPR-GW controller comes with a factory installed GPRS modem option for remote access via the cellular network with service provided by Wyless Communications. Various service plans are available from Wyless depending on the amount of data needed to be passed on a monthly basis. Additionally, an optional GPRS modem card is available to allow installation in the field if it was not initially purchased with the WEB-602-XPR.

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## FEATURES

- **Embedded Power PC platform @ 524 MHz**
- **Supports wide variety of open and legacy protocols**
- **Web User interface serves rich graphical presentations and live data to any browser**
- **Runs stand-alone control, energy management, and multi-protocol integration**
- **BTL<sup>®</sup> listed when BACnet driver is used – complies with B-BC (BACnet Building Controller)**
- **Option board socket for optional communications card**
- **Compact wall-mount design for easy installation**
- **Built-in 24 volt AC/DC power supply**
- **Onboard 16 point I/O**
- **Integral GPRS modem with Wyleless SIM available for remote access via Wyleless ISP service**

## SPECIFICATIONS

### Hardware Platform

AMCC PowerPC 440 @ 524 MHz processor with math coprocessor  
256 MB SDRAM, 128 MB Serial Flash

### Operating System

QNX RTOS, IBM J9 JVM Java Virtual Machine  
Real-time clock - 3 month backup minimum via on-board NiMh battery  
Requires NiagaraAX Release 3.4.51 or later

### Communications

2 Ethernet Ports – 10/100 Mbps (RJ-45 Connectors)  
1 RS-232 Port (RJ-45 connector)  
1 RS-485 non isolated port (Screw Connector on base board)  
1 socket for optional communication cards  
1 USB port (future use)

### Onboard I/O

8 Universal Inputs  
0-100K ohm – Input accuracy is +/- x% of span without calibration  
0-10 volts - Input accuracy is +/- 2% of span without calibration  
0-20 mA - Input accuracy is +/- 2% of span, without calibration, self-powered or board-powered sensors accepted, uses an external resistor for current input (four provided).  
10K type 3 thermistor - Sensor Range –23.3°C to +115.5°C (–10° to +240° F), input accuracy is +/-1% of span.  
Dry contact; 3.3 volt open circuit, 300-uA short-circuit current.  
Pulsing dry contact at a rate of up to 20 Hz; 50% duty cycle  
4 relay outputs - Form A contacts, 24 VAC/ 30 VDC, 0.5 Amp, suitable for on / off control only, floating control not supported  
4 analog outputs - 0-10 volt, 2500 Ohm minimum impedance

### Power Input

24 Volts AC or DC, 40 Watts Max  
Screw terminal connection

### Battery Backup

On-board NiMh Batteries - 5 minutes of run-time typical.  
Shutdown/database backup begins within 10 seconds of power failure detected.  
Optional external 12 VDC Sealed Lead Acid battery(s) – runtime dependant upon AH rating of battery(s) and connected devices.

### Controller Connections

All IO terminated via removable screw terminal blocks for easy installation. Terminations are on 0.2" centers for all inputs and outputs in blocks of 6 or more screws.

### Mechanical

12 5/8" (320.7 mm) L x 7 1/2" (190.5mm) W x 2 1/4" (57.2mm) H  
Weight: 2.5 lbs (1.13 Kg) net; 3.5 lbs (1.59 Kg) gross  
Molded plastic enclosure  
Wall mount - screw mount chassis  
Cooling: Internal air convection  
Wiring access holes provided at top and bottom of case and via knockouts on base for hidden wiring

### Environment

Operating temperature range: 0° to 50° C (32° F to +122° F)  
Storage Temperature range: 0° to 70° C (32° F to +158° F)  
Relative humidity range: 5% to 95%, non-condensing

## ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE<sup>®</sup> wholesaler or distributor, refer to the TRADELINE<sup>®</sup> Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. Your local Honeywell Automation and Control Products Sales Office (check white pages of your phone directory).
2. Honeywell Customer Care  
1885 Douglas Drive North  
Minneapolis, Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Toronto, Ontario M1V 4Z9.

International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

## ORDERING INFORMATION

### WEBS-AX 602 Controllers

Part Number	Description
WEB-602-XPR	Building controller includes 256 MB RAM/128 MB Flash, (2) 10/100 Mb Ethernet ports, (1) RS-485 serial port, (1) RS-232 serial port, onboard IO including (8) universal inputs, (4) digital outputs, and (4) analog outputs, (1) socket for optional communication cards, and a 24 Volt AC or DC input power supply. Standard features include Niagara-AX station and Web User Interface. Standard drivers include oBIX Client/Server and Niagara Network (Fox) Client/Server. Factory mounted in a wall-mount vinyl enclosure. Embedded Workbench is optional. <b>Requires Niagara AX Release 3.4.51 or higher.</b>
WEB-602-XPR-GW	Same as WEB-602-XPR but with factory installed GPRS modem and Wyleless SIM card.
WEB-602-XPR-O	Building controller includes 256 MB RAM/128 MB Flash, (2) 10/100 Mb Ethernet ports, (1) RS-485 serial port, (1) RS-232 serial port, onboard IO including (8) universal inputs, (4) digital outputs, and (4) analog outputs, (1) socket for optional communication cards, and a 24 Volt AC or DC input power supply. Standard features include Niagara-AX station and Web User Interface. Standard drivers include oBIX Client/Server and Niagara Network (Fox) Client/Server. Factory mounted in a wall-mount vinyl enclosure. Embedded Workbench is optional. Controller with WEBs open license (accept.wb.in = ""). <b>Requires Niagara AX Release 3.4.51 or higher.</b>
WEB-602-XPR-GW-O	Same as WEB-602-XPR-O but with factory installed GPRS modem and Wyleless SIM card.

### WEBS-AX 602 Controller Communication Option Cards

Part Number	Description
NPB-LON	78 Kbps FTT10 Compatible Lon Adapter
DR-LONFT10-AX	78 Kbps FTT10 Compatible Lon Adapter Card and Lon Driver Bundle
NPB-RS232	Optional RS-232 port adapter with 9 pin D-shell connector
NPB-2X-RS485	Optional dual port RS-485 adapter; electronically isolated
NPB-MDM	Optional 56 Kbps Auto-dial/Auto-answer Modem.
NPB-GPRS-W-XPR	GPRS Modem retrofit kit for WEB-602-XPR(O) controller. Uses the slot for optional communication cards. Includes a Wyleless SIM and a remote mount antenna with mounting bracket.

## AGENCY LISTINGS

- RoHS compliant
- UL 916, E207782 Energy Management
- C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment"
- FCC part 15 Class A
- BTL B-BC BACnet Building controller listed when the BACnet driver is installed and configured
- CE

EMS Standards Applied	Standard Description	Criteria Met
CISPR 16-2-3:2006	Radiated Emissions - Class A	Compliant
IEC 61000-4-2	Electrostatic Discharge Immunity	PASS Class B
IEC 61000-4-3	Radiated Electromagnetic Field Immunity	PASS Class A
IEC 61000-4-4	Electrical Fast Transient/Burst Immunity	PASS Class B
IEC 61000-4-6	Conducted Radio-Frequency Immunity	PASS Class A
IEC 61010-1	Safety requirement for electrical equipment for measurement, control and laboratory use	PASS

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