Honeywell

WEBs-AX 202 Express

WEB-202-XPR/WEB-202-XPR-GW

PRODUCT DATA

PRODUCT DESCRIPTION

Honeywell's WEB-202-XPR(GW) is an embedded controller and server platform designed for remote monitoring and control applications. Save labor and space with the WEBs-AX 202 Express – this 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 reliable platform.

The WEB-202-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^{AX} Framework®, the industry's leading software technology that integrates diverse systems and devices into a seamless system. Niagara^{AX} supports a range of protocols including LonWorks®, BACnet®, Modbus, oBIX and many Internet standards. The Niagara^{AX} Framework also includes integrated management tools to support the design, configuration and maintenance of a unified, real-time controls network.

APPLICATION

For small facilities, the WEB-202-XPR is an ideal solution – this 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 facility. The system may be accessed via an Ethernet LAN or remotely from anywhere over the Internet.

For multi-site applications, the WEB-202-XPR is ideal for providing the distributed control and monitoring required for reliable operation of a large scale distributed 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 three remote input / output modules interfaced via the controller's RS-485 port.

The WEB-202-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-202-XPR.

Contents

63-2701-02

FEATURES

- **Embedded Power PC platform @ 250 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® 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 Wyless SIM available for remote access via Wyless ISP service**

SPECIFICATIONS

Hardware Platform
AMCC PowerPC 405EP @ 250 MHz processor
128 MB SDRAM, 64 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

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 impedence

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. Shut-down/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

WEBs-AX 202 Controllers

Part Number	Description
WEB-202-XPR	Building controller includes 128 MB RAM/64 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. **Requires Niagara AX Release 3.4.51 or higher.**
WEB-202-XPR-GW	Same as WEB-202-XPR but with factory installed GPRS modem and Wyless SIM card.
WEB-202-XPR-O	Building controller includes 128 MB RAM/64 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 = “*”). **Requires Niagara AX Release 3.4.51 or higher.**
WEB-202-XPR-GWO	Same as WEB-202-XPR-O but with factory installed GPRS modem and Wyless SIM card.

WEBs-AX 202 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 Kpbs Auto-dial/Auto-answer Modem.
NPB-GPRS-W-XPR	GPRS Modem retrofit kit for WEB-202-XPR(O) controller. Uses the slot for optional communication cards. Includes a Wyless 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

Automation and Control Solutions
Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Honeywell Limited-Honeywell Limitée
35 Dynamic Drive
Toronto, Ontario M1V 4Z9
customer.honeywell.com

63-2701—02 M.S. Rev. 08-10
Printed in U.S.A.

Honeywell