

WEBs-AX 700

WEB-700 / WEB700-O

PRODUCT DATA



PRODUCT DESCRIPTION

The WEB-700/O is a next generation embedded server product that runs on the standard Niagara^{AX} platform. This embedded server platform supports multiple applications like building automation and energy management on the same platform. The WEB-700 is designed to provide high performance for control functions in a convenient din-rail mounted package. The WEB-700 can be accessed by remote Web browsers over a local Intranet or via the Internet or an optional GPRS Modem card.

The WEB-700 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 medium to large facilities, the WEB-700 is an ideal solution – this powerful platform with its embedded user interface and rich graphical displays is all that's needed to handle the control, monitoring, and energy applications of a medium to large sized facility. The system may be accessed via an Ethernet LAN or remotely from anywhere over the Internet. An optional GPRS modem may be added for wireless communications.

For multi-site enterprise applications, or large scale control applications, the WEB-700 is ideal for providing the distributed control and monitoring required for reliable operation of a large scale system. 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.

With its on-board battery charging and monitoring circuit, the WEB-700 can provide uninterrupted building monitoring and control during power interruptions. Up to 1 GB RAM and 1 GB Flash memory are available to provide the capacity needed for the graphics, trend data, applications, and history required for a larger system.

Contents

Product Description	1
Application	1
Features	2
Specifications	2
Ordering Information	3
Agency Listings	3



74-5093-01

FEATURES

- **QNX® Operating System with IBM J9 Java Virtual Machine**
- **Supports standard Niagara objects and feature set components**
- **Powerful 440Epx PowerPC processor @ 667 MHz.**
- **Scalable Plug-in DDR-2 memory (field upgradable)**
- **Gigabit Ethernet & USB ports**
- **RS-232 and Isolated RS-485 ports**
- **Communication option slots for optional communication interface cards**
- **Supports Serial RS-232, RS-485 communication protocols with optional drivers**
- **Supports LonWorks with optional communication card, BACnet, Modbus, Sedona Framework with optional wireless option card, and Remote I/O modules**
- **Power - 15 volts DC @ 20 W from optional universal input Din-rail mounted supply**
- **Rechargeable internal NiMH battery backup, for short term power fail events**
- **Built-in recharging and monitoring support for an external 12V sealed lead-acid backup battery, for longer power fail durations. Built-in contact inputs are also available for UPS monitoring**
- **Multiple Mounting Options – DIN rail mounting or panel mounting using tabs on unit base**

SPECIFICATIONS

Hardware Platform

667 MHz 440Epx Power PC processor
 Base unit – 512 MB DDR-2 333 MHz RAM,
 field-upgradable to 1GB
 One GB NAND flash memory on board for database storage,
 trend storage and system software

Operating System

QNX OS version 6.3.2 with IBM J9 Virtual Machine version 2.3
 Requires NiagaraAX Release 3.5 or higher.

Communications

Two 1 Gigabit Ethernet ports
 Two USB 2.0 ports (for future application use)
 One RS-232 and one isolated RS-485 ports
 Two JACE communication slots for optional JACE communication interface card use

Battery Backup

Internal battery backup to allow system database save after power failure, plus maintenance of Real-time clock for up to one year.
 Optional external 12 VDC Sealed Lead Acid battery(s) – runtime dependant upon AH rating of battery(s) and connected devices.

Power Input

15 VDC at 20 Watts max. Uses NPB-WPM-US wall plug-in module or NPB-PWR-UN-H universal power supply

NOTE: The NPB-WPM-US is supplied with a “barrel plug” which must be removed and the wires attached to the JACE terminal connector to use this power option.

Mechanical

Housed in molded plastic enclosure
 Cooling: Internal air convection
 Dimensions (approx): 8-1/2 in. wide X 6 in. high X 2-5/8 in. tall (215.9 mm wide X 152.4 mm high X 68.3 mm tall)
 Panel mounting via screws or standard Din rail
 Weight: Net 4 lbs. (1.814 kg), Gross 5 lbs. (2.268 kg)

Environment

0 to 50 °C, 32 to 122 °F; 0 to 90% RH, non-condensing (for electronics)

ORDERING INFORMATION

Controllers and Memory Expansion	
Part Number	Description
WEB-700	Din-Rail or Surface Mounted controller with 512 MB RAM / 1 GB Flash memory, one RS-232 and one RS-485 port, two Gigabit Ethernet ports, two USB ports, two standard communication card slots, and internal battery backup. Power module must be selected separately. Standard drivers include oBix Client/Server and Niagara Network (Fox) Client/Server communications. Includes Niagara Station and Web UI. Requires NiagaraAX Release 3.5 or higher.
WEB-700-O	Same as WEB-700 but with WEBs Open license (accept.wb.in = "")
NPM-1GB	RAM upgrade to 1 GB DDR-2 333MHz

Batteries and Power Options	
Part Number	Description
NPB-BATT-7	Replacement Backup battery assembly
712BNP	7AH, 12 VDC Sealed Lead Acid Backup Battery
NPB-WPM-US	Wall power module; US plug. See Note under "Power Input" on page 2.
NPB-PWR-UN-H	Universal Power Supply module (90-263 VAC, 50/60 Hz. Din Rail or panel mount.

Communication Option Cards	
Part Number	Description
NPB-GPRS-W-H	Optional GPRS Modem communications card with SIM card for connection via Wyless network; Wyless is the only approved service provider for the continental US, consumes one option card slot.
NPB-RS232	Optional RS-232 communication card, consumes one option card slot
NPB-2X-RS485	Optional dual RS-485 communication ports on one option card; consumes one option card slot
NPB-MDM	Optional Auto-dial / Auto-answer 56 KBPS modem; consumes one option card slot; cannot be used if NPB-GPRS-W modem is selected.
NPB-LON	Optional Lon FTT10A communications card, consumes one option card slot. Lon driver must be ordered separately.

AGENCY LISTINGS

- UL 916
- C-UL listed to Canadian Standards Association (CSA)
- C22.2 No. 205-M1983 "Signal Equipment"
- CE
- FCC part 15 Class A
- RoHS compliant
- BTL B-BC listed when optional BACnet driver is used

LonWorks® is a registered trademark of Echelon Corporation.

NiagaraAX Framework® is a registered trademark of Tridium, Inc.

BACnet® is a registered trademark of the American Society of Heating, Refrigerating, and Air-conditioning Engineers.

QNX® is a registered trademark of QNX Software Systems.

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

® U.S. Registered Trademark
© 2010 Honeywell International Inc.
74-5093—01 M.S. 03-10
Printed in U.S.A.

Honeywell