Honeywell

WEB-645

SPECIFICATION DATA

OVERVIEW

Honeywell's WEB-645 is an embedded controller/server platform designed for remote monitoring and control applications. The unit combines integrated control, supervision, data logging, alarming, scheduling, device communication and network management functions, with Internet connectivity and web serving capabilities in a small, compact platform. The WEB-645 makes it possible to control and manage external devices over the Internet and present real time information to users in web-based graphical views.

In addition to supporting WEBs-AX Framework applications, the WEB-645 can optionally support WEBs-R2 applications. This option provides the ideal platform for projects currently utilizing WEBs-R2 technology where a cost effective migration to WEBs-AX solution is desired. The WEBs-AX platform can be installed and optionally configured to support a facility utilizing a WEBs-R2 application today. At a later date, the facility can migrate to a WEBs-AX, powered by NiagaraAX Framework application, thus spreading the cost of the migration across multiple phases.

The WEB-645 is part of the WEBs-AX portfolio of Java-based controller/server products, software applications and tools, designed to integrate a variety of devices and protocols into unified, distributed systems. WEBs products are powered by the NiagaraAX Framework®, the industry's leading software technology that integrates diverse systems and devices into a seamless system. WEBs-AX supports a range of protocols including LonWorks®, BACnet®, Modbus, oBIX and many Internet standards. The WEBs-AX framework also includes integrated management tools to support the design, configuration and maintenance of a unified, real-time controls network. The LonWorks® FTT-10A port, four RS-485 ports, two RS-232 ports, metal enclosure and line voltage input power supply, make this platform ideal for a wide variety of integration applications.

APPLICATIONS

The WEB-645 is ideal for smaller facilities, remote sites, and for distributing control and monitoring throughout large facilities. It is also ideal for managing and controlling today's energy applications. The WEB-645 includes one LonWorks® FTT-10A port, four RS-485 ports and two RS-232 ports providing support for a wide range of field buss connections to remote I/O and stand-alone controllers. In small facility applications, the WEB-645 is all you need for a complete system. The WEB-645 serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet. In larger facilities, multi-building applications and large-scale control system integrations, AX Supervisor™ software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of WEB-645 controllers into a single unified application.

FEATURES

- **Embedded PowerPC Platform@ 524MHz**
- **One LON FTT10A port for LON device integration**
- **Four RS-485 ports for connection to open and proprietary protocol devices**
- **Two RS-232 ports (electrically isolated) for Integration or technical support**
- **Web UI services to support many simultaneous users using an optional internal modem over the intranet or Internet via a standard web browser**
- **One WEBs-AX option slot supporting NPB-XXX option modules**

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ORDERING INFORMATION

Item	Description
WEB-645-AX	Base Unit including two Ethernet ports, two RS-232 ports, four RS-485 ports, one LonWorks® FTT-10A port, and closed NiCS. Web User Interface and WEBs Connectivity included. oBIX Client/Server driver included.
WEB-645-AX-O	Base Unit including two Ethernet ports, two RS-232 ports, four RS-485 ports, one LonWorks® FTT-10A port, and open NiCS. Web User Interface and WEBs Connectivity included. oBIX Client/Server driver included.
WEB-645I-AX	International version of theBase Unit including two Ethernet ports, two RS-232 ports, four RS-485 ports, one LonWorks® FTT-10A port, and closed NiCS. Web User Interface and WEBs Connectivity included. oBIX Client/Server driver included.
WEB-645I-AX-O	International version of the Base Unit including two Ethernet ports, two RS-232 ports, four RS-485 ports, one LonWorks® FTT-10A port, and open NiCS. Web User Interface and WEBs Connectivity included. oBIX Client/Server driver included
WEB-R2-6XX	Capability to utilize a WEBs R2 based application.
NPM-256MB	Upgrade RAM memory to 256 MB DDR.

Note: Refer to current price list for additional options.

SPECIFICATIONS

Platform
PowerPC 440 524 MHz processor
128MB DDR RAM & 128 MB Serial Flash
Optional 256 MB DDR RAM
SLA Battery Backup
Real-time clock

Communications
Two 10/100 Mb Ethernet port – RJ-45 connection
Two RJ-45 connectors for RS-232 port
Four screw terminal RS-485 ports (up to 78,600 baud for MSTP)
One LonWorks port – FTT-10A with Weidmuller connector
One WEBs-AX option slot (see available option modules below)

Available WEBs-AX Option Modules

Item	Description
NPB-LON	LON® Card
NPB-RS232	RS 232 Card
NPB-2X-RS485	Dual Port RS 485 Card
NPB-ZWAVE	ZWAVE Card Only
NPB-SED-001	Sedona Wired/Wireless Card

Operating System
QNX Real-time Operating System
Sun HotSpot JVM Java Virtual Machine
WEBs-AX 3.6.45 or later

Power Supply
WEB-645-AX: 120VAC, 50/60 Hz.,
WEB-645I-AX: 230VAC, 50/60 Hz,
25 VA maximum.
Lead wires for hot/neutral (wire nut), stud for ground connection. WEB-645I has two-screw terminal strip for AC power connections, plus a stud for ground.

Battery Backup
Battery backup provided for all on board functions.
Battery is monitored and trickle-charged.
Battery maintains processor operation through power failures for a pre-determined interval, then writes all data to flash memory, shuts processor down, and maintains clock for a minimum of five years.

Chassis
Housed in metal enclosure; intended for indoor wall mounting only.
Cooling: Internal air convection
Dimensions: 11 in. wide X 14 in. high X 2.5 in. deep (27.94 cm wide X 35.56 cm high X 6.35 cm deep)
Weight: Net 4 lbs. (1.814 kg), Gross 5 lbs. (2.268 kg).

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

Agency Listings
RoHS Compliant
BTL
UL 916
C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 “Signal Equipment”
CE
FCC part 15 Class B

Other
Maximum Lon devices = up to 124
Maximum MSTP devices per RS-485 port = 31 standard load
124-¼ load devices; requires one MSTP driver per port.
Port speeds supported are:
4,800 baud
9,600 baud
19,200 baud
38,400 baud
57,600 baud
76,800 baud

ARCHITECTURE

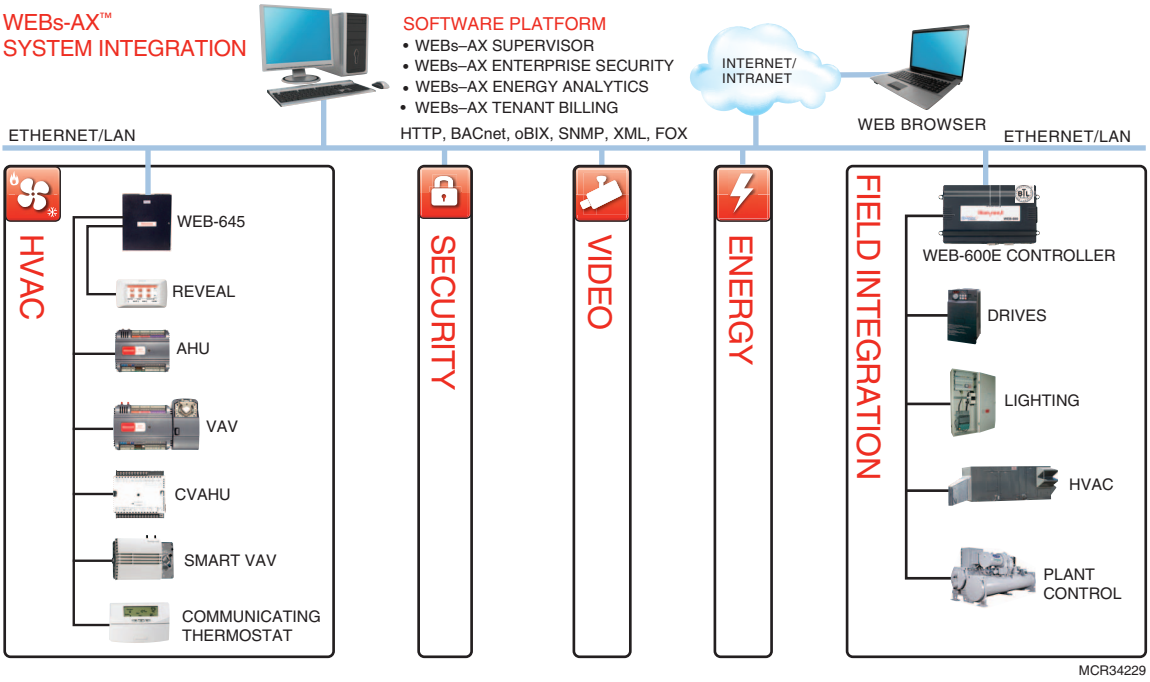

Fig. 1. WEBs-AX System Integration.

Automation and Control Solutions

Honeywell International Inc.

1985 Douglas Drive North

Golden Valley, MN 55422

customer.honeywell.com

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