The VYKON JACE 600E is an embedded web server that seamlessly integrates diverse systems and devices. Data integrity is maintained without batteries using the Niagara^{AX} Data Recovery Service.

VYKON JACE-600E

Overview

The VYKON JACE-600E™ is a compact embedded controller/server platform. It combines integrated control, supervision, data logging, alarming, scheduling and network management functions with Internet connectivity and web serving capabilities in a small, compact platform. The JACE-600E makes it possible to control and manage external devices over the Internet and present real-time information to users in rich graphical views.

The JACE-600E is one of VYKON's suite of products, which are designed to integrate a variety of devices and protocols into unified, distributed systems. These products are powered by the revolutionary Niagara^{AX} Framework®, the industry's first software technology designed to seamlessly integrate diverse systems and devices. Niagara^{AX} supports a wide range of protocols including LonWorks™, BACnet™, Modbus, oBIX and Internet standards. The Niagara^{AX} Framework also includes integrated network management tools to support the design, configuration, installation and maintenance of interoperable networks.

The JACE-600E enhancements include data recovery services for battery less operation and increased operating ambient temperature. Battery maintenance is no longer necessary when using data recovery services. However, the JACE-600E can still be installed with an optional battery and can provide up to 10 minutes of operation during power outages and disturbances if equipped.

Applications

The JACE-600E is ideal for small to medium sized facilities, remote sites, and for distributing control and monitoring throughout large facilities. Optional input/output modules can be added for applications where local control is required. The JACE-600E also supports a wide range of field busses for connection to remote I/O and standalone controllers. In small facility applications, the JACE-600E is all you need for a complete system.

The JACE-600E 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, The VYKON AX Supervisor™ software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of JACEs into a single unified application. The VYKON AX Supervisor can manage global 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 or the Internet

Features

- Embedded PowerPC Platform@ 524MHz
- Supports open and legacy protocols
- Run stand-alone control, energy management, and integration applications within the JACE-600E series controllers
- Web User interface (standard) serves rich graphical browser presentations
- QNX Real-time Operating System
- Supports two optional communications boards
- Optional 16 and 34 point I/O Modules
- Data Recovery Service prevents data loss during power interruptions
- Optional battery available for extended runtime

VYKON®

Powered by Niagara^{AX} FRAMEWORK®

Ordering Information

Part Number	Part Description
JACE-600E	
J-600E	Includes 128 MB RAM/128 MB Flash, 2 10/100 Mb Ethernet ports, 1 RS-485 serial port, 1 RS-232 serial port, NDIO port and 2 communication card option slots. Standard features include Web User Interface and Data Recovery Service. Standard drivers include oBIX Client / Server and Niagara Network (Fox) Client / Server. Designed for DIN rail or surface mounting.
J-600E-A	Manufactured in the USA version of the J-600E.
NPM-256	Memory Expansion License from 128 to 256 MB.
WP-AX-WEB	Embedded VYKON Workplace^{AX} license.
I/O Modules	
IO-16	Includes 8 Universal Inputs, 4 Form A Relay Outputs, and 4 0-10 VDC Analog Outputs Contains removable screw terminal connectors, and status indication LEDs. Intended for DIN rail mounting. Connects directly to NDIO connector on JACE or adjoining module. Maximum 4 modules per JACE or 2 modules when IO-34 is installed.
IO-16-A	Manufactured in the USA version of the IO-16.
IO-34	Includes 16 Universal Inputs, 10 Form A Relay Outputs, and 8 0-10 VDC Analog Outputs. Contains removable screw terminal connectors and status indication LEDs. Intended for DIN rail mounting. Connects directly to NDIO connector on JACE. Includes an on-board 24V AC/DC power supply that may be used to power the JACE. Maximum 1 module per JACE.
IO-34-A	Manufactured in the USA version of the IO-34.
IO-16-485	Includes 8 Universal Inputs, 4 Form A Relay Outputs, and 4 0-10 VDC Analog Outputs Contains removable screw terminal connectors, and status indication LEDs. Intended for DIN rail mounting. Connects to RS-485 port on the JACE or option card. Maximum 16 modules per JACE. Manufactured in the USA.
Power Modules / Battery Assembly	
NPB-PWR	24 V AC/DC Power Supply Module, DIN Rail Mountable. Manufactured in the USA.
NPB-PWR-UN	90 - 263 VAC 50 / 60 Hz Auto sensing Power Supply Module, DIN Rail Mountable. Acceptable for ambient temperatures between 0-50°C.
WPM-US	90 - 240 VAC, 50/60 Hz. Wall Adaptor - U.S. plug type
WPM-EUR	90 - 240 VAC, 50/60 Hz. Wall Adaptor - European plug type
WPM-UK	90 - 240 VAC, 50/60 Hz. Wall Adaptor - U.K. plug type
NPB-BATT	Optional Battery Assembly, Provides up to 10 minutes of runtime during power outages and disturbances
Communication Option Cards	
NPB-GPRS-W	GPRS Modem option, bundled with Wyless SIM card. Manufactured in the USA.
NPB-LON	78 Kbps FTT 10 A LON® adapter. Manufactured in the USA.
NPB-ZWAVE-US	ZWAVE card for North America. Communicates over radio 908.42 MHz frequency at 40kbps.
NPB-ZWAVE-EU	ZWAVE card for Europe. Communicates over radio 868.42 MHz frequency at 40kbps. Uses one option card slot in the JACE®.
NPB-2X-485	Dual Port RS 485 Option Card
NPB-232	Single Port RS 232 Option Card. Manufactured in the USA.
NPB-SED-001	Sedona Wired/Wireless Option Card with Antenna

Specifications

Platform

- PowerPC 440 524 MHz processor
- 128MB DDR RAM & 128 MB Serial Flash
- Optional 256 MB DDR RAM
- SRAM Data Recovery Service
- Real-time clock

Operating System

- QNX Real-time Operating System
- Oracle Hotspot Java 5 VM
- Requires Niagara^{AX} 3.6 or later

Optional I/O Modules

IO-34 - 34 Point I/O Module

- Max of 1 per J-600E; includes integral 24 volt AC/DC input power supply for JACE and IO; no other power required
- 16 Universal Inputs (Type 3 (10k) Thermistors, 0-1000 ohm, 0-10 volts, 0-20 mA with external resistor)
- 10 relay outputs (Form A contacts, 24 VAC @.5 amp rated
- 8 analog outputs (0-10 volt DC)

IO-16 - 16 Point I/O Module

- Up to 4 per J-600E, 2 per J-600E if combined with a 34 Point I/O module
- 8 Universal Inputs (Type 3 (10k) Thermistors, 0-1000 ohm, 0-10 volts, 0-20 mA with external resistor)
- 4 relay outputs (Form A contacts, 24 VAC @.5 amp rated
- 4 analog outputs (0-10 volt DC)

IO-16-485 Remote IO module

- 16 IO Points per device
- 8 Universal Inputs - Type 3 (10k) Thermistors, 0-100K ohm, 0-10 vdc, 0-20 mA with external resistor
- 4 relay outputs (Form A contacts, 24 VAC @ .5 amp rated)
- 4 analog outputs (0-10 vdc)
- Up to 16 remote IO-16-485 modules max per J-600E

Chassis

- Construction: Plastic, din rail or screw mount chassis, plastic cover
- Cooling: Internal air convection

Power Options

- Direct connect (Pin compatible) to the NPB-PWR and NPB-PWR-UN power supplies.
- Direct connect (Pin compatible) to IO-34 34 point I/O Module powered by 24 volt AC/DC power supply
- Connected to WPM-xxx wall module via barrel connector
- Optional battery kit provides up to 10 minutes of runtime during power outages and disturbances
- External 15 VDC power supply connected via screw terminals

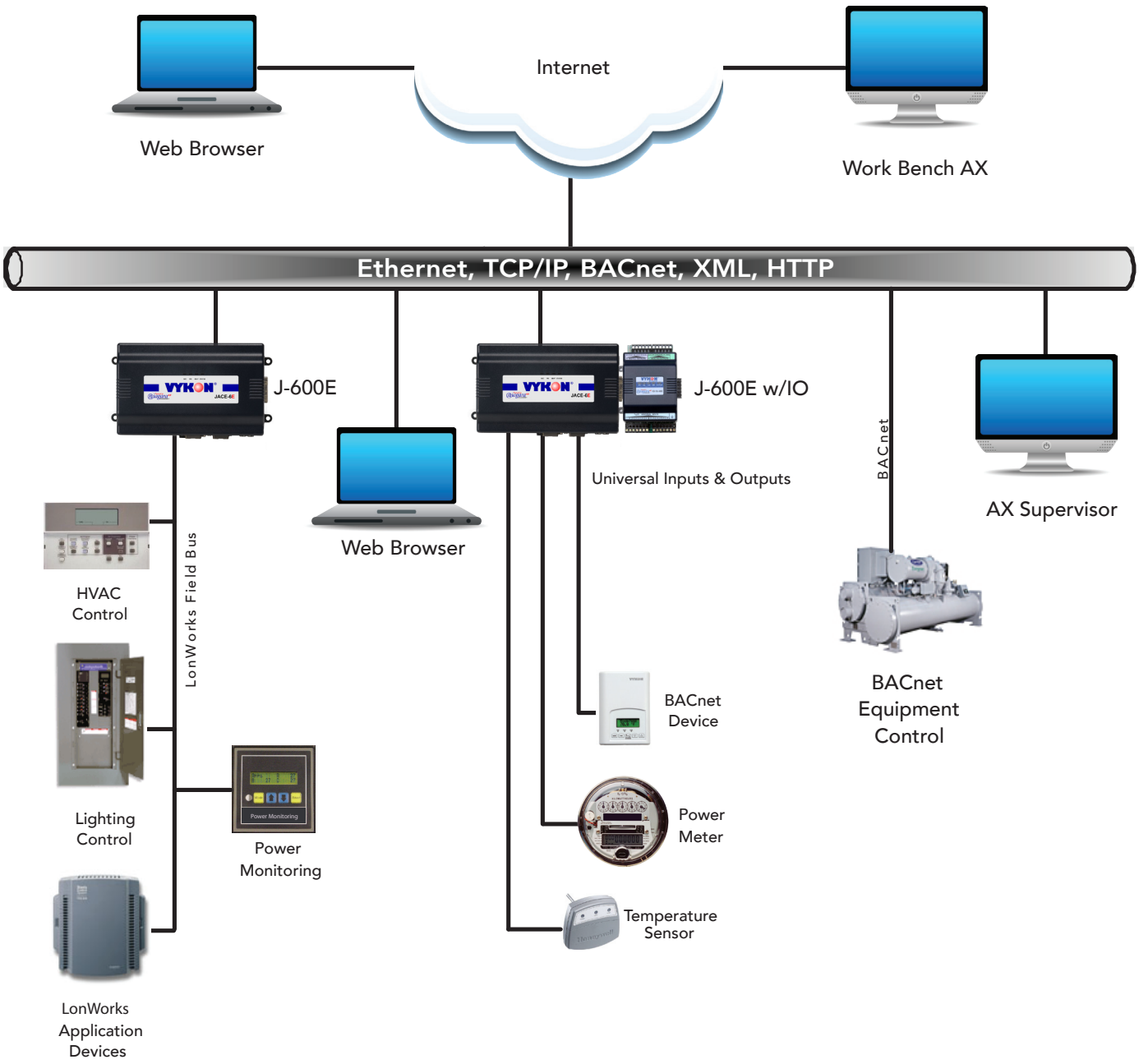
Environment

- Operating temperature range: 0° to 60°C (32°F to 140°F)
- Operating temperature range: 0° to 50°C (32°F to 122°F) with optional battery kit
- 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 B-BC
- UL 916
- C-UL listed to Canadian Standards Association (CSA)
- C22.2 No. 205-M1983 "Signal Equipment"
- CE
- FCC part 15 Class B

Architecture



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