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Vykon JACE-600™

Overview

The Vykon JACE-600™ (Java Application Control Engine) 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-600 makes it possible to control and manage external devices over the Internet and present real-time information to users in web-based graphical views.

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

Applications

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

The JACE-600 serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, or dial-up modem. In larger facilities, multi-building applications and large-scale control system integrations, 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 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, the Internet, or dial-up modem.

Features

- Embedded PowerPC Platform @ 524MHz
- Supports open and legacy protocols
- QNX Real-time Operating System
- Web User interface (standard) serves rich graphical browser presentations
- Run stand-alone control, energy management, and integration applications within the JACE-600 series controllers
- Supports two optional communications boards
- Optional 16 and 34 point I/O Modules

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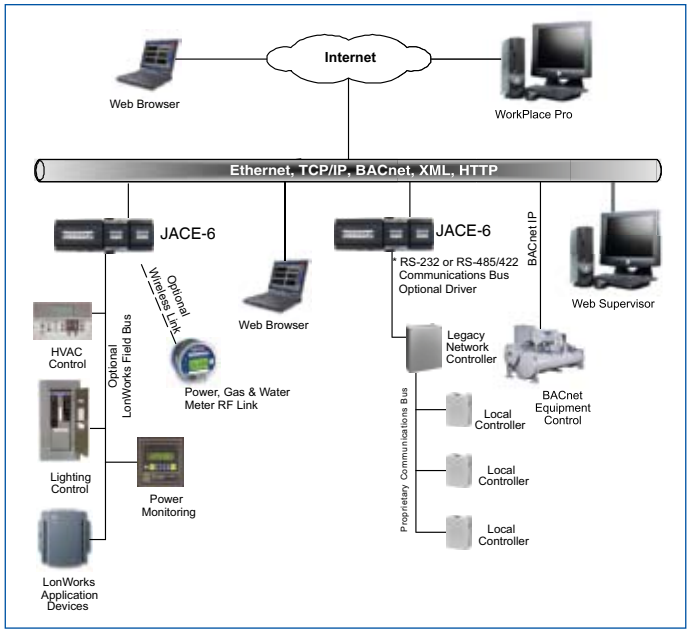

Drawing shown with optional IO Modules

Ordering Information

J-600
Base Unit including two Ethernet ports, one RS-232 port, one RS-485 port, one USB port, Web User Interface and Niagara Connectivity included. oBIX Client/Server driver included.

Specifications

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

Optional Communications Cards

NPB-LON Optional 78 Kbps FTT10 A Lon Adapter
NPB-232 Optional RS-232 port adapter with 9 pin Dshell connector
NPB-2X-485 Optional dual port RS-485 adapter; electrically isolated

Memory Upgrade Option
NPB-256 Upgrade RAM memory to 256 MB DDR

Operating System
- QNX Real-time Operating System
- IBM J9 JVM Java Virtual Machine
- Niagara^{AX} 3.1 or greater

Power Supply
NPB-PWR Optional: 24 Volt AC/DC power supply module, Din Rail mounted
Optional Wall Power Modules –
(Note: All modules are universal input 90 – 240 volts, 50/60 Hz.; the model numbers below represent the various plug configurations only)

WPM-US 120 Vac, 50- 60 Hz. US
WPM-EUR 230 Vac, 50-60 Hz. Europe/Asia
WPM-UK 230 Vac 50-60 Hz. UK
WPM-JA 100 Vac 50-60 Hz. Japan

NPB-PWR-UN
Optional universal voltage input power supply module, Din Rail mounted. Input voltage is 90 – 263 Volts AC, 50 / 60 Hz, auto adjusting.

Optional I/O Modules
IO-34 - 34 Point I/O Module
- Max of 1 per Jace-600; includes integral 24 volt AC/DC input power supply for JACE 2 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 Jace-600, 2 per Jace-600 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)

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

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
- UL 916, C-UL listed to Canadian Standards Association (CSA) C22.2 No.
- 205-M1983 “Signal Equipment”, CE, FCC part 15 Class A.

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