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## VYKON JACE-NXS



### Overview

VYKON® is a product suite developed on the Niagara Framework® that provides an end-to-end building automation solution. Users can seamlessly integrate LonWorks®, BACnet®, Modbus®, OPC®, oBIX, and other standard protocols with legacy systems to provide a unified real-time controls network. The suite includes a browser-based graphical user interface allowing users to view and manipulate underlying systems without the need for dedicated workstations or client software.

VYKON provides the ability to create a customized user interface that combines intuitive navigation screens with dynamic, real-time displays. Third party graphic images, jpegs, and gif images can also be used in the creation of the user interface. Unique software technology eliminates the need for page refreshes or polling for data updates, thereby minimizing required bandwidth.

VYKON JACE® (Java Application Control Engine) products bundle this software capability in a hardware platform that can be installed in typical building control environments. JACEs connect to system field busses and provide real-time control functions as constant streams of data from individual systems are instantaneously transformed to a common object model within the JACE. JACEs provide a fully distributed system when multiple units are networked together, which provides unsurpassed scalability and reliability. In this configuration, the VYKON Web Supervisor® can be used to network JACE controllers and manage enterprise-level control functions. The appropriate JACE model is determined by connectivity and computing power requirements.

### Applications

The JACE-NXS is ideally suited for integration, monitoring and control in commercial and light industrial installations.

It has greater computing power with 512 MB RAM standard, 1-Gb Flash drive, optional hard drive, and a 650 MHz Celeron processor in a fan-less cabinet. Jace NXS-AX-FL has no moving parts which provides increased reliability. The JACE NXS-AX-FL includes an integral UPS. This superior computing and processing power make it ideal for installations where large amounts of archives and graphics are required. Because it has a PC processor platform with hard disk and is offered with either full or embedded Microsoft™ Windows XP, the JACE-NXS is ideal for organizations whose IT policies dictate Microsoft products or when applications such as OPC require a Windows-based operating system. This unit is available with either VYKON Release 2 or AX software.

The JACE-NXS can be wall-mounted or panel-mounted (din-rail) depending on the location requirements and conditions. Built-in communication ports give this controller flexibility to meet most connectivity requirements.

## Features

- High performance Intel Celeron Microprocessor provides fast, reliable processing
- Real-time control engine provides local closed-loop control across protocols
- Integral energy management routines
- Trending, scheduling, alarm notification via email
- Distributed architecture provides scalability and reliability
- Can be integrated with other JACE controllers for large scale systems
- Options for either a Flash memory based or Hard Drive based version

## Ordering Information

Part Number	Description
JACE-NXS-R2	NXS with Hard drive and R2 software. Base Unit including one RS-232 port, one RS-485 port (electrically isolated), and two 10/100 Mb Ethernet Network Interfaces, one Lonworks FTT10A interface port, and four USB ports. Universal input power supply included with each unit. Includes UI WebServer and Niagara Connectivity for AX versions.
J-NXS-AX-FL	JACE-NXS with 1 Gb Flash Memory, universal input power supply and UPS module with battery and AX software -Version 3.4 or later
J-NXS-AX-HD	JACE-NXS with 512 MB RAM, 40 Gb Hard drive, universal power supply and AX software -Version 3.4 or later
<b>Software Options</b>	
NX-UI	Web UI Server Option for Release 2 version only
<b>JACE-NXS Options</b>	
NXS-UPS	Optional UPS for JACE-NXS-R2 or J-NXS-AX-HD. Already included in J-NXS-AX-FL

## Specifications

### Platform

- High Speed Intel Celeron CPU @ 650 MHz
- 512 MB RAM
- 1-Gb Flash drive(J-NXS-AX-FL) or
- 40 Gb hard drive (J-NXS-AX-HD)
- Real-time clock with lithium battery backup

### Communications – Base Unit

- One 10/100-mbit Ethernet port - RJ 45 connection
- One high-speed RS-232 serial port; DB-9 connector
- One RS-485 Port, electrically isolated
- One Lon FTT10 A port (78 KBps)

### Operating System

- Embedded version of Microsoft Windows™ XP, Microsoft Java Virtual Machine or Sun Hotspot VM, depending on version.
- Includes either R2.3.527 or later or AX 3.4 or later

Note: BACnet MSTP driver is not available for this JACE

### Power Supply

Input voltage: JACE-NXS (any version) - 100 VAC-240 VAC

Input frequency: 47 to 63Hz

Input power: 2A Max./115V and 1A Max./230V

A battery backup unit is included with the Flash equipped JACE-NXS and provides approximately 15 minutes backup time, depending on battery state of charge and environmental conditions, this unit is optional for the JACE-NXS-R2 and J-NXS-AX-HD

### Chassis

Construction: Heavy-duty steel chassis

Cooling: Convection Fin cooling / no fans

Dimensions: 172 (6-13/16") W x 192 (7-9/16") H x 256 (10-1/16") D. Units in mm and (inches).

Weight: Net 4.5Kg. (9.9 lbs.) / Gross 6.3Kg. (13.9 lbs.)

### Environment

J-NXS-AX-FL	Operating temperature range: 0°C to 50°C (32°F to 122°F)
J-NXS-AX-HD	Operating temperature range: 0°C to 40°C
JACE-NXS-R2	(32°F to 104°F)

Storage Temperature range: 0°C to 70°C (32°F to 158°F)

Relative humidity range: 5% to 95%, non-condensing

### Agency Listings

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

\*Note: BACnet MSTP is not supported on this JACE

RoHS  
Compliant

### Architecture

