VYKON™ Building

JACE-511™ JACE-511-UI™

The Niagara Framework™ is a suite of Java-based software designed to integrate a variety of devices and protocols into a common distributed infrastructure. It is the industry's first software technology to integrate LonWorks™, BACnet™ and various Internet standards in a common object model, embedded at the controller level and supported by a standard Web browser interface. The Framework also includes integrated network management tools to support the design, configuration, installation and maintenance of interoperable networks.

The Niagara JACE-511 (**J**ava **A**pplication **C**ontrol **E**ngine) is a compact embedded processor platform with Flash Memory for backup. It provides integrated control, supervision, and network management solutions for a network of LonWorks™ based application controllers for building control. When connected over an Ethernet network, the JACE-511 can communicate to BACnet™ devices or systems and share data between the LonWorks devices and BACnet systems. A complete set of Java™ based control, application, logging, and user interface "objects" are included in a library for the Systems Integrator to create a robust control system for any size building. The JACE-511-UI with Web User Interface Service (UI), can be provided and connected to the Internet. In this configuration, the system's graphical views can be accessed using any standard Web browser such as Netscape Navigator™ or Internet Explorer™.

Applications

Specifically designed for mechanical room, factory floor, and other harsh environments, the JACE-511 is ideally suited for System Integrators or users who require a rugged and compact controller that can be wall-mounted, or enclosure mounted depending on location requirements.

On a small building, a single JACE-511 controller can be used to support a network of BACnet and LonWorks devices that can be accessed directly over the Ethernet LAN or remotely over the Internet, or via dial-up modem.

On larger buildings or multi-building complexes and large-scale control system integrations, the Niagara Web Supervisor™ in conjunction with one or more JACE-511s manages global control functions, supports data passing over multiple networks, and hosts multiple, simultaneous client workstations connected over the local network, the Internet, or dial-up modem access.

JACE – 511™

Product Data Sheet

Features

- Embedded RISC Microprocessor platform
- Distributes real-time control functions across an Ethernet LAN
- Cost effective for any size installation
- Run applications in a single unit, stand alone application
- Multiple JACE-511 stations can be used in a large scale system configuration
- Can be configured with Web User Interface services to support many simultaneous users over Intranet or Internet via standard Web browser (JACE-511-UI)

Powered by niagara FRAMEWORK™

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JACE-511™ JACE-511-UI™

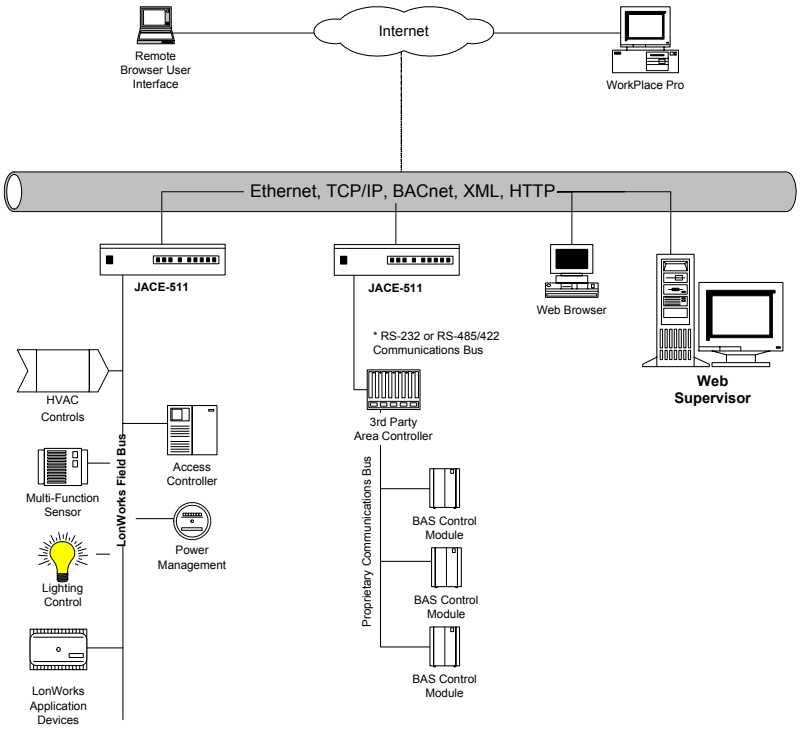
Ordering Information

- **JACE-511**

  Base Unit including one LonWorks Trunk Interface and one 10/100 Mb. Ethernet Network Interface. *Requires one Niagara Web Supervisor per project or site.*

- **JACE-511-UI**

  Base Unit with WEB User Interface Service including one LonWorks Trunk Interface and one 10/100 Mb. Ethernet Network Interface. *Intended for standalone operation with Browser access either locally over an Intranet or over the Internet when provided with an ISP connection.*



Specifications

Platform

Motorola RISC Processor @ 200 MHz.
Integrated floating point processor
128 MB RAM
8 MB Flash for Database backup; 32 MB SmartMedia Flash for OS and System Modules
Battery Backup
Real-time clock

Communications

One 10/100 mbit Ethernet port - RJ 45 connection
One LonWorks™ port - FTT-10 with Weidmuller connector
One RS 232 port
One Software selectable RS 232 / 485 port -Non Isolated

Operating System

Wind River VxWorks™ Operating System with Jeode™
Java Virtual Machine
JACE (Control Engine) Software - with BACnet™ and LonWorks™ support

Power Supply

Input voltage: 24 Volts AC or DC (-15%, +25%)
Input frequency: 47 to 63Hz (on AC power)
Input power: 13 W max. 10 W typical

Chassis

Construction: Heavy-duty steel chassis, Plastic Cover
Cooling: Internal air convection
Dimensions: (318) 12 ½ ” W x (286) 11 ¼” H x (89) 3 ½” D. Units in (mm) and inches
Weight: Net (4 lbs.) / Gross (5 lbs.)

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, CSA (Canadian Standards C22.2 no. 205-M 1983, Signaling Equipment), CE, FCC part 15 Class A

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Contact Tridium or your local Niagara Systems Integrator for information about the Niagara open system framework.
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