JACE® 8000 Features and Niagara 4 Licensing

TridiumTalk
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Agenda

- JACE 8000 overview
- Niagara 4 licensing
- Distribution
- Selection process
- Q&A

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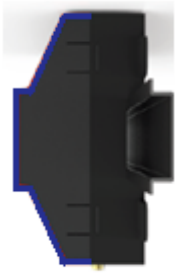
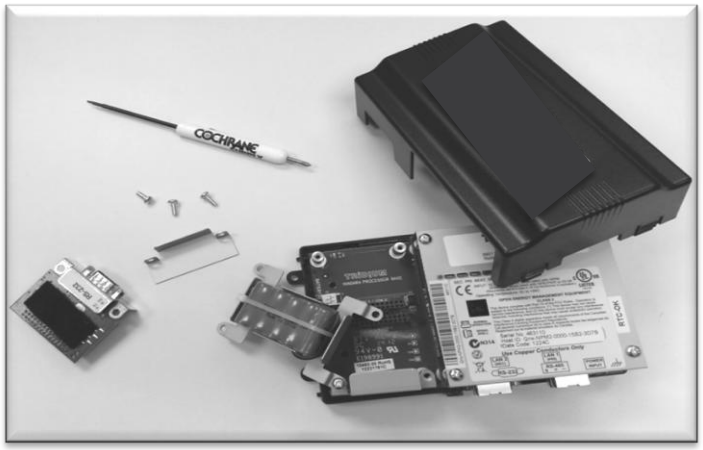
JACE 8000 platform at-a-glance



- Premier Niagara 4 engine providing software task compression
- Modular hardware design for faster, easier installation
- Global design with enhanced enclosure compatibility
- Enhanced wireless capability, reducing installation labor and materials
- Prominent brand ID, allowing for OEM differentiation
- Address hardware obsolescence for enhanced availability and cost

Tool-less Installation



Existing JACE

- Requires tools to install an option card
- Error prone if pins misaligned
- Limited to two option modules

JACE 8000

- Tool-less installation
- Hot pluggable expansion
- Allows up to 4 modules
- Improved DIN rail clip

Faster, easier installation

Existing JACE

- Limited support for wireless protocols
- Limited resources for emerging standards

JACE 8000

- Lower installation costs
- Enable use of wireless devices
- Reduce installation labor
- Reduce material costs

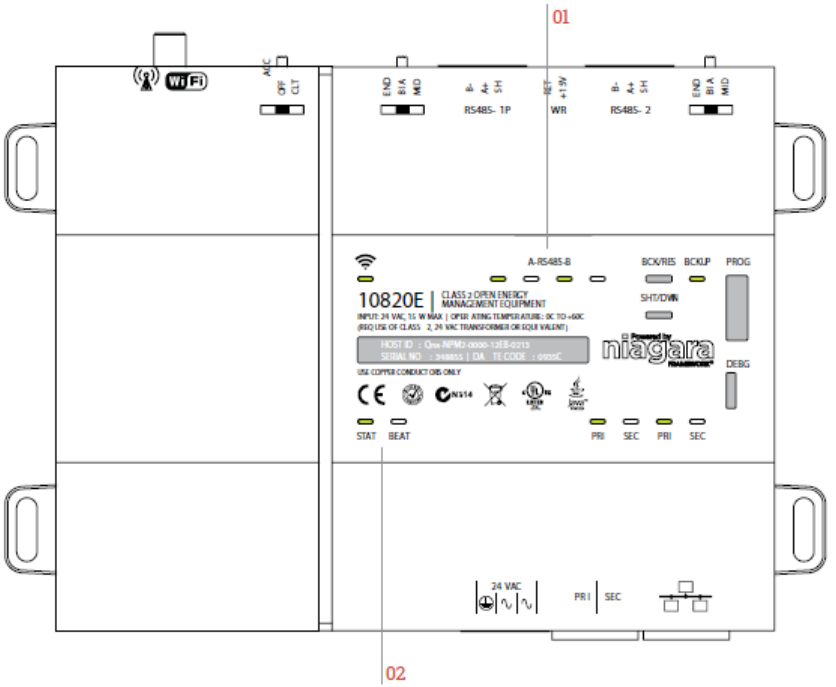
High Performance Core

Hardware specifications

- TI AM3352 @ 1GHz
- 1GB RAM
- 4GB flash total storage / 2GB user storage
- Wi-Fi (Client or WAP)
- USB flash drive
- High-speed field bus expansion
- (2) Isolated RS 485
- (2) 10/100MB Ethernet ports
- -20-60C^0 Ambient operating temp

Agency certifications

- UL 916
- CE 61326
- FCC Part 15 Subpart B, Class B
- FCC Part 15 Subpart C
- C-Tick
- C-UL



Accessories

- NPB-8000-2X-485 – Dual RS 485 Expansion (2)
- NPB-8000-LON – LON FTT10A Expansion (4)
- NPB-8000-232 – RS 232 Expansion (4)
- IO-16-485 – RS485 16 point IO module (16)

Simplified licensing model

Niagara AX
Multiple Hardware Platforms

JACE 7
(~200 Devices)

JACE 6E+
(~80 Dev)

JACE 6E
(~40 Dev)

Software license

JACE 3E+
(~20 Dev)

JACE 3E
(~10 Dev)

Software license

Niagara 4
One Hardware Platform: JACE 8000

Software license

8200
(200 Devices)

8100
(100 Devices)

8025
(25 Devices)

8010
(10 Devices)

8005
(5 Devices)

50Pts/Dev

Drivers:
Standard included, special/custom – add on

AAM-PUP
FLEX
AAM-PHP
CCN

Simplifying the Distribution

OEMs and distributors only need to stock hardware

JACE 8000 Hardware

USD Card

Single Hardware Platform

- Less inventory (fewer parts on the shelf)
- Less inventory (no SW to stock)
- Easier upgrades
- Added rebrand flexibility

Consistent capacity-based licensing

Niagara AX
Various license restrictions

- Supervisor-UNL
- Supervisor-10
- WorkBench

JACES managed

Niagara 4 Portfolio
Consistent capacity packs

- Supervisor-UNL
- Supervisor-100
- Supervisor-10
- Supervisor-3
- Supervisor-2

JACES managed

Add JACEs or devices as needed

Drivers:
Ad hoc
500pt packs

- BACnet
- LON
- Modbus
- KNX
- SNMP
- IP Video

Drivers:
Standard IP included

Special IP – Ad hoc
10, 25, 50, 100 device packs

- IP Video
- DB Drivers

Buying Niagara 4: JACE 8000

Part Number	Description
JACE 8000	Single JACE 8000, includes branding & uSD card
NC-8005	5 Device Core
NC-8010	10 Device Core
NC-8025	25 Device Core
NC-8100	100 Device Core
NC-8200	200 Device Core
SMA-8005-1YR	1 Year Maintenance (Included)
SMA-8005-3YR	3 Year Maintenance
SMA-8005-5YR	5 Year Maintenance
DEVICE-UP-10	10 Device Upgrade
DEVICE-UP-25	25 Device Upgrade
DEVICE-UP-50	50 Device Upgrade

Add Niagara
Includes standard drivers

Add Maintenance

Upgrades

Buying Niagara 4: Supervisor

Choose Niagara Connections

Choose Field Device Capacity
Includes std drivers
Optional

Add Maintenance
1-5 years

Supervisor	Description
SUP-0	0 Niagara network connections
SUP-1	1 Niagara network connection
SUP-10	10 Niagara network connections
SUP-UNL	Unlimited Niagara network connections
SUP-DEVICE-10	10 Device Core (Std drivers included)
SUP-DEVICE-25	25 Device Core (Std drivers included)
SUP-DEVICE-50	50 Device Core (Std drivers included)
SUP-DEVICE-100	100 Device Core (Std drivers included)
SUP-0-SMA-1YR	Supervisor Maintenance – 1 Year (Included)
SUP-0-SMA-3YR	Supervisor Maintenance – 3 Year
SUP-0-SMA-5YR	Supervisor Maintenance – 5 Year

Comparing Niagara AX and Niagara 4

Small job comp	JACE-3E	JACE 8000
Capacity	Heap/kRU	Devices/points
Power Supply	NPB-PWR	Included
Drivers	Add-on	Standard included
Additional Options	Embedded workbench	Included
Maintenance	JACE-MA-AX	Included
Additional enhancements		
Niagara 4	Visualization improvements Tagging/templating Advanced security features	
JACE 8000	Faster UI (stronger CPU) Wi-Fi Upgradeable!	

JACE 8000 in action: ESSI Beta project

Goals

- Upgrade Niagara software and hardware for several K-12 schools
- Manage energy usage, optimize efficiency and reduce costs
- Provide fast, reliable performance; large capacity for history and alarming; suitability for HTML5

Solution: JACE 8000

- Six JACE 8000 controllers connecting 63,291 points and 1,147 devices
- Initial JACE connected 261 BACnet devices to monitor and manage chillers, air handlers, VAVs, FCUs, Modbus power meters, and lighting
- 150-200 edge devices managed per site

Results

- Increased capacity, flexibility and ease of use
- Overall CPU usage 30 percent less compared to NXS
- History and alarming capacity more than met the requirements

Optimizing greater connectivity and the Internet of Things