

JACE 8000 controller

PRODUCT DEFINITION

The JACE® 8000 is a compact, embedded IoT (Internet of Things) controller and server platform for connecting multiple and diverse devices and sub-systems. With internet connectivity and web-serving capability, the JACE 8000 controller provides integrated control, supervision, data logging, alarming, scheduling and network management. It streams data and rich graphical displays to a standard web browser via an Ethernet or wireless LAN, or remotely over the internet. VYKON Enterprise Security is an application that runs within the Niagara Framework® on the JACE 8000. VYKON Integrated Analytics is a data analytics extension to the Niagara Framework available on JACE 8000 controllers.

The licensing model for the JACE 8000 controller is simplified and features standard drivers, along with optional IO and field bus expansion modules for ultimate flexibility and expandability. The JACE 8000 controller operates with Niagara 4, the latest version of the Niagara Framework, for optimum performance. In larger facilities, multi-building applications and large-scale control system integrations, Niagara 4 Supervisors can be used with JACE 8000 controllers to aggregate information, including alarms, and historical and real-time data, to create a single, unified application.



HARDWARE SPECIFICATIONS

TI AM3352: 1000MHz ARM® Cortex™-A8

1GB DDR3 SDRAM

Removable micro-SD card with 4GB flash total storage/2GB user storage

Wi-Fi (Client or WAP)
IEEE802.11a/b/g/n
IEEE802.11n HT20 @ 2.4GHz
IEEE802.11n HT20/HT40 @ 5GHz
Configurable radio (Off, WAP, or Client)
WPAPSK/WPA2PSK supported

USB type A connector
Back-up and restore support

(2) isolated RS-485 with selectable bias and termination

(2) 10/100MB Ethernet ports

Secure boot

*Supply requirements: 24VAC rated at 24VA minimum, or 24VDC rated at 1A (24W) minimum

Runs Niagara 4: 4.1 and later

VYKON Integrated Analytics 2.1 is compatible with Niagara 4.4 and later

Real-time clock

Batteryless

*VYKON Enterprise Security requires four hours of standby power

ORDERING INFORMATION: SOFTWARE & SOFTWARE MAINTENANCE

Every JACE 8000 comes with a Niagara 4 software license and Tridium's standard drivers. Purchase of a software maintenance agreement (SMA) is required with initial JACE licensing. The initial SMA is for 18 months, with extended agreements of 3 years and 5 years available for discounted rates.

Note: An active Software Maintenance Agreement (SMA) is required for a Niagara instance to run the latest version of Niagara. When SMA expires, the licensed version will remain at the version that's in effect at time of the expiration. To upgrade, the requisite maintenance terms (1-year, 3-year, 5-year) are required to bring the SMA expiration date to current or future date.

ORDERING INFORMATION: VYKON INTEGRATED ANALYTICS

25 analytic points are included with every JACE 8000 license. VYKON Integrated Analytics licenses are conveniently and cost-effectively based on the number of analytical points and do not expire. Your Software Maintenance Agreement covers all VYKON Integrated Analytics enhancements, adding to the value of the SMA.

key features

- Data analysis at the onsite JACE controller level
- Real-time on-premise analytic control

Part number	Description
NA-EC-N4-100	VYKON Integrated Analytics Framework (on Niagara 4) license for 100 analytic points for an Embedded Controller (JACE 8000)
NA-EC-N4-250	VYKON Integrated Analytics Framework (on Niagara 4) license for 250 analytic points for an Embedded Controller (JACE 8000)
NA-EC-N4-500	VYKON Integrated Analytics Framework (on Niagara 4) license for 500 analytic points for an Embedded Controller (JACE 8000)
NA-EC-N4-1000	VYKON Integrated Analytics Framework (on Niagara 4) license for 1,000 analytic points for an Embedded Controller (JACE 8000)

Find additional data sheets for
VYKON Integrated Analytics
on VYKON's website

EXPANSION MODULE AND IO CONFIGURATIONS

MAXIMUM EXPANSION (MODULES SUPPORTED)

- NPB-8000-LON (4)
- NPB-8000-232 (4)
- NPB-8000-2X-485 (2)

MAXIMUM IO (MODULES SUPPORTED)*

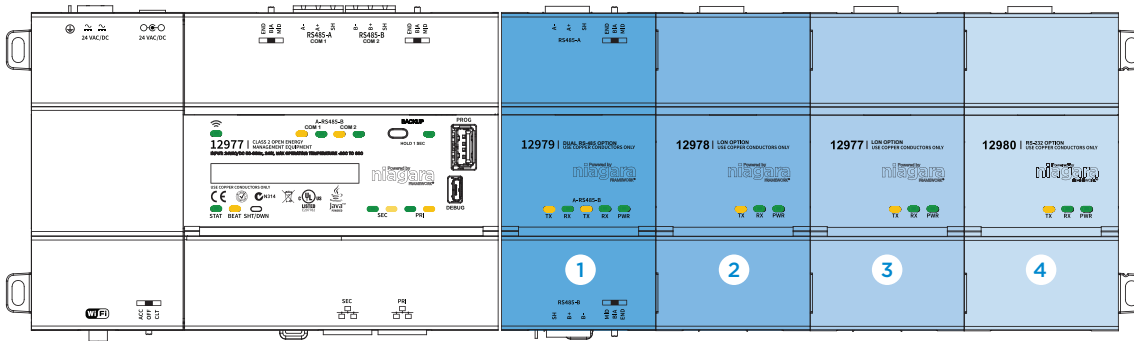
- IO-R-16 (16)*
- IO-R-34 (8)*

*See JACE 8000 IO R data sheet for configuration details

MAXIMUM NIAGARA ENTERPRISE SECURITY (MODULES SUPPORTED)*

- SEC-R2R*
- SEC-RIO*

*16 total each or combined



MAXIMUM COMBINATIONS

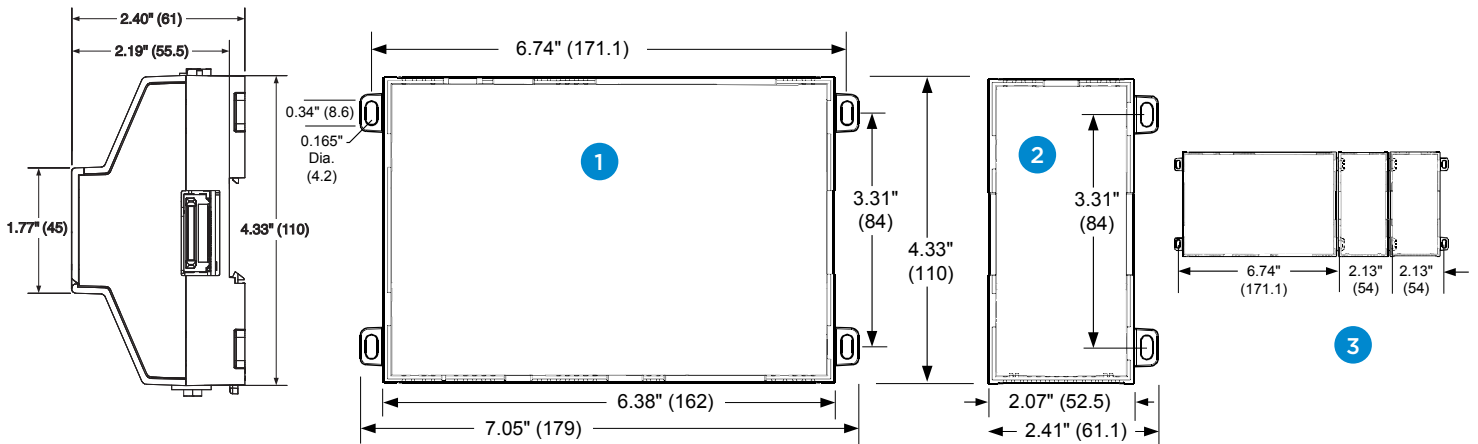
EXPANSION 1	EXPANSION 2	EXPANSION 3	EXPANSION 4
232 or LON	232 or LON	232 or LON	232 or LON
485	232 or LON	232 or LON	232 or LON
485	485	232 or LON	
485	485		

Expandability is dependent on the type of expansion module used



JACE® 8000 CONTROLLER MOUNTING & DIMENSIONS

- 1 JACE 8000 controller. Allow at least 1.5" (38mm) clearance around all sides and minimum 3" (76mm) at bottom for Wi-Fi antenna
- 2 Expansion module. Up to four (4) may be used. See "Expansion Module and IO Configurations"
- 3 Distances between center of tabs from one unit to another unit



Compatible with (DIN43880) enclosures

Suitable for mounting to a panel or to an EN50022 standard 35mm rail

Vizio stencils available upon request

AGENCY CERTIFICATIONS

- UL 916
- CE EN 61326-1
- RCM
- FCC Part 15 Subpart B, Class B
- FCC Part 15 Subpart C
- C-UL listed to Canadian Standards Association (CSA) C22.2 No. 205-M1983 "Signal Equipment"
- 1999/5/EC R&TTE Directive
- SRRC
- RSS
- RoHS

ENVIRONMENTAL SPECIFICATIONS

- **Operating temperature:** -20-60°C
- **Storage temperature:** -40-85°C
- **Humidity:** 5%-95% — Non condensing
- **Shipping & vibration:** ASTM D4169, Assurance Level II
- **MTTF:** 10 years+

Contact support@tridium.com for the latest agency certifications or global shipping guide

JACE® 8000 ORDERING INFORMATION

Part number	Description
J-8005	JACE 8000 Controller, microSD card, 2 10/100 Mb Ethernet ports, 2 RS-485 serial ports. Licensed for 5 Device/250 Point Limit. Includes standard open drivers.
J-8010	JACE 8000 Controller, microSD card, 2 10/100 Mb Ethernet ports, 2 RS-485 serial ports. Licensed for 10 Device/500 Point Limit. Includes standard open drivers.
J-8025	JACE 8000 Controller, microSD card, 2 10/100 Mb Ethernet ports, 2 RS-485 serial ports. Licensed for 25 Device/1,250 Point Limit. Includes standard open drivers.
J-8100	JACE 8000 Controller, microSD card, 2 10/100 Mb Ethernet ports, 2 RS-485 serial ports. Licensed for 100 Device/5,000 Point Limit. Includes standard open drivers.
J-8200	JACE 8000 Controller, microSD card, 2 10/100 Mb Ethernet ports, 2 RS-485 serial ports. Licensed for 200 Device/10,000 Point Limit. Includes standard open drivers.
JACE-8000 Non-Wi-Fi	Identical in form and function to standard JACE-8000 model without the Wi-Fi module and peripherals.
JEC-834	JACE 8000 Equipment Controller with remote connected 34 point I/O module. Includes microSD card, 2 10/100 Mb Ethernet ports, 2 RS-485 serial ports and integration ready. Includes standard open drivers with 0 device & 0 point capacity. I/O module and Device expandable.
DEVICE-10	Up to 10 devices/500 point upgrade (can be purchased during initial licensing)
DEVICE-25	Up to 25 devices/1,250 point upgrade (can be purchased during initial licensing)
DEVICE-50	Up to 50 devices/2,500 point upgrade (can be purchased during initial licensing)
NPB-8000-2X-485	JACE 8000 controller — add on dual port RS-485 module
NPB-8000-LON	JACE 8000 controller — add on single port LON FTT10A module
NPB-8000-232	JACE 8000 controller — add on single port RS-232 module
WPM-8000	Universal power supply for JACE 8000 controller
IO-R-16	Optional 16 point IO RS485 module designed for use with the JACE 8000 — Includes 8 Universal Inputs, 4 Form A Relay Outputs and 4 0-10 VDC Analog Outputs
IO-R-34	Optional 34 point IO RS485 module designed for use with the JACE 8000 — Includes 16 Universal Inputs, 10 Form A Relay Outputs and 8 0-10 VDC Analog Outputs

JACE® 8000 ORDERING INFORMATION: VYKON ENTERPRISE SECURITY

VYKON ENTERPRISE SECURITY ON THE JACE 8000

Part number	Description
SEC-J8-32	VYKON Enterprise Security license for JACE 8000 controller on N4 platform. Includes licensing for 32 readers (not included in capacity). Does not include the JACE 8000 controller.

JACE ACCESSORIES FOR VYKON ENTERPRISE SECURITY

Part number	Description
SEC-R2R	Security module for 2 readers/access doors and 2 digital inputs
SEC-RIO	Security module with 8 supervised inputs, 8 relay outputs and 2 digital inputs
SEC-ENC-LNP	Large enclosure with keyed lock, door status switch, and 2 din rails for mounting JACE 8000 controller and up to 4 remote reader modules or 2 remote IO modules. Several other combinations of devices may be mounted in this panel. Dimensions: 17"W x 22"H x 4"D.

Find additional data sheets for
the VYKON Enterprise Security
application on VYKON's website

The JACE 8000 controller is available through a wide variety of Niagara Community partners. Our open distribution business model and open protocol support allow a vendor-neutral application compatible with devices and systems throughout the world. Contact your VYKON partner today to get started.

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