## data sheet

# JACE® 8000 controller

## PRODUCT DEFINITION

The JACE 8000 is a compact, embedded Niagara Framework®-based controller and server platform for connecting multiple and diverse devices and sub-systems. It's designed as a Network Automation Controller optimized for BAS applications. 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. The licensing model for the JACE 8000 controller features standard drivers along with optional IO and field bus expansion modules for ultimate flexibility and expandability. The JACE 8000 controller is optimized for Niagara 4, which takes a "defense-in-depth" approach to Internet of Things security and is secure by default. In larger facilities, multi-building applications and largescale control system integrations, Niagara 4 Supervisors can be used with JACE 8000 controllers to aggregate information, including real-time data, history and alarms, to create a single, unified application.

#### SPECIFICATIONS

TI AM3352: 1000MHz ARM® Cortex<sup>™</sup>-A8 with secure boot

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 switch-selectable bias and termination

(2) 10/100MB Ethernet ports

24VAC/DC power supply

Runs Niagara 4.1 and later

Real time clock

Batteryless

Supports SSL and TLS encryption





## EXPANSION MODULE AND IO CONFIGURATIONS

#### MAXIMUM EXPANSION (MODULES SUPPORTED)

MAXIMUM IO (MODULES SUPPORTED)

- NPB-8000-LON (4)
- 10-16-485 (16)
- NPB-8000-232 (4)
- NPB-8000-2X-485 (2)

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#### MAXIMUM COMBINATIONS

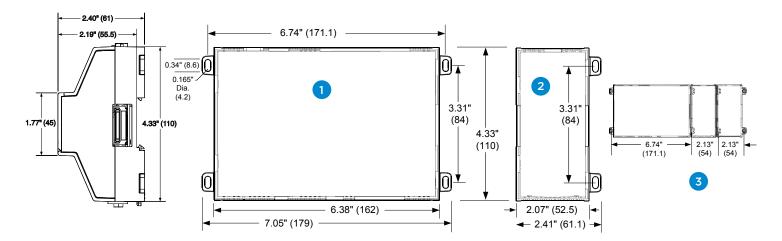
EXPANSION	EXPANSION 2	EXPANSION 3	EXPANSION 4
232 or	232 or	232 or	232 or
LON	LON	LON	LON
485	232 or	232 or	232 or
485	LON	LON	LON
485	485	232 or	
485	485	LON	
485 485	485 485		

Expandability is dependent on the type of expansion module used



## JACE® 8000 CONTROLLER MOUNTING & DIMENSIONS

- 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"
  - 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

#### AGENCY CERTIFICATIONS

• UL 916

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- CE EN 61326-1
- 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
- CCC
- 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+



## ORDERING INFORMATION

Part number	Description
J-8005	JACE® 8000 for 5 devices/250 point core
J-8010	JACE 8000 for 10 devices/500 point core
J-8025	JACE 8000 for 25 devices/1,250 point core
J-8100	JACE 8000 for 100 devices/5,000 point core
J-8200	JACE 8000 for 200 devices/10,000 point core
DEVICE-10	Add 10 devices/500 points to initial order
DEVICE-25	Add 25 devices/1,250 points to initial order
DEVICE-50	Add 50 devices/2,500 points to initial order
DEVICE-UP-10	Upgrade of 10 devices/500 points to existing license
DEVICE-UP-25	Upgrade of 25 devices/1,250 points to existing license
DEVICE-UP-50	Upgrade of 50 devices/2,500 points upgrade to existing license
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	JACE 8000 100-240V universal power supply
IO-16-485	Remote IO module, compatible with the JACE 8000 controller. Communication using RS 485, maximum IO supported IO-16-485 modules: 16
NPB-PWR	24V power supply for IO-16-485
NPB-PWR-UN	Universal power supply for IO-16-485

JACE 8000s include a Niagara 4 license and Tridium's standard drivers. Please see Tridium's Niagara 4 drivers documentation for more details.

To learn more about how to purchase, install and start using the JACE 8000 controller, contact your VYKON partner. The global community of certified Niagara professionals can serve your unique business needs across any industry or geographic region.



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