

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.

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 real-time data, history and alarms, 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

24VAC/DC power supply

Runs Niagara 4.1 and later

Real time clock

Batteryless



powered by

niagara
framework[®]

EXPANSION MODULE AND IO CONFIGURATIONS

MAXIMUM EXPANSION MODULES SUPPORTED

NPB-8000-LON: 4

NPB-8000-232: 4

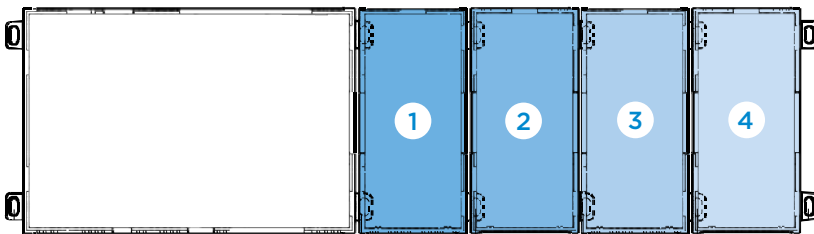
NPB-8000-2X-485: 2

MAXIMUM IO MODULES SUPPORTED

T-IO-16-485: 16

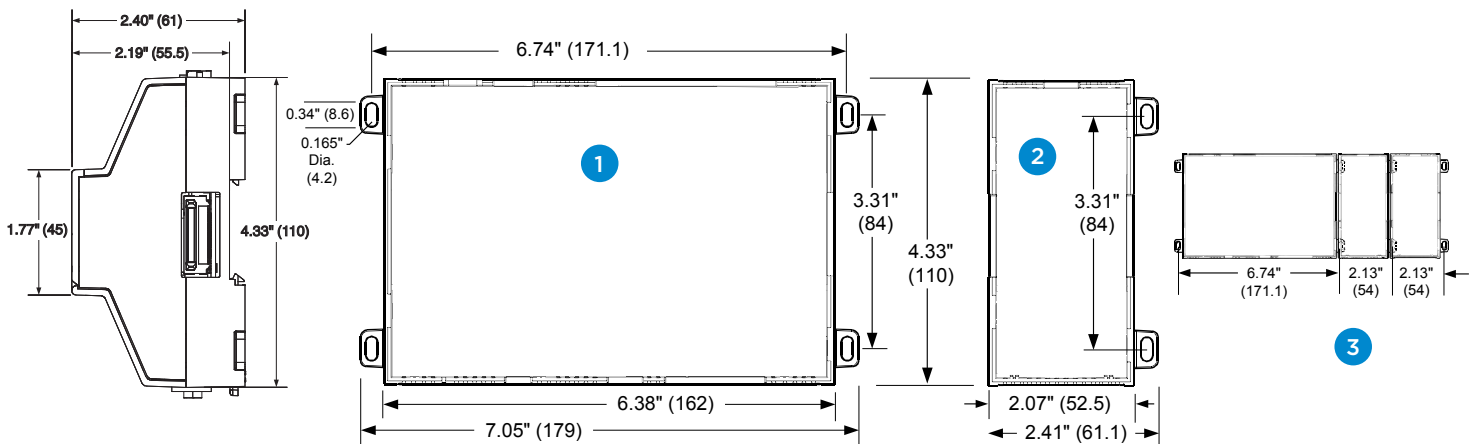
MAXIMUM COMBINATIONS

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



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

AGENCY CERTIFICATIONS

- UL 916
- 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 |
|-----------------|---|
| JACE-8000 | Base unit includes two isolated RS485 ports, two 10/100MB Ethernet ports, USB Backup & Restore and Wi-Fi connectivity |
| JACE-8000-DEMO | Base unit includes two isolated RS485 ports, two 10/100MB Ethernet ports, USB Backup & Restore, Wi-Fi connectivity, all available Tridium drivers and a 500 device license. Hardware Accessories purchased separately |
| NC-8005 | Up to 5 devices/250 point core |
| NC-8010 | Up to 10 devices/500 point core |
| NC-8025 | Up to 25 devices/1,250 point core |
| NC-8100 | Up to 100 devices/5,000 point core |
| NC-8200 | Up to 200 devices/10,000 point core |
| 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) |
| DEVICE-UP-10 | Up to 10 devices/500 point upgrade (can be purchased post initial licensing) |
| DEVICE-UP-25 | Up to 25 devices/1,250 point upgrade (can be purchased post initial licensing) |
| DEVICE-UP-50 | Up to 50 devices/2,500 point upgrade (can be purchased post initial licensing) |
| JACE-8000-AX | Enables JACE® 8000 controller to run Niagara AX (3.8U). 3.8U Build with JACE 8000 controller support |
| 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 |
| T-IO-16-485 | Remote IO module, compatible with the JACE 8000 controller. Communication using RS 485, maximum IO supported T-IO-16-485 modules: 16 |
| T-NPB-PWR | 24V power supply for T-IO-16-485 |
| T-NPB-PWR-UN | Universal power supply for T-IO-16-485 |

**All NC-8XXX parts include a Niagara 4 license and Tridium's standard driver suite. Please see Tridium standard driver suite documentation for more details.*

The JACE 8000 controller is available through a wide variety of original equipment manufacturers. Our open distribution business model and open protocol support allow a vendor-neutral application compatible with devices and systems throughout the world.



804.747.4771 Corporate HQ / 877.305.1745 Customer Support

tridium.com

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2015-0013