

JACE® 8000



SPECIFICATIONS

SOFTWARE

Compatible with I/A Series G3 3.8 Update 1, Niagara 4.1 or higher

Secure boot

Real-time clock

ELECTRICAL

Power Supply

24 Vac +/-10 %, 50/60 Hz
or 24 Vdc +/-10 %

Battery not required

HARDWARE

CPU

TI AM3352: 1000MHz ARM® Cortex™-A8 processor

Memory

1GB DDR3 SDRAM memory

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

Specifications continued on next page.

INTRODUCTION

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 Webserving 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.

FEATURES

The licensing model for the JACE 8000 controller is simplified and features standard drivers, as well as 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, multibuilding 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.

CONNECTIVITY

The JACE 8000 controller has the following ports and connections:

- Two isolated RS-485 ports
- Two 10/100 Mbit Ethernet ports
- USB type A connector port
- Wi-Fi Configurable radio (Off, WAP, or Client)
- Additional ports and connections are available with the addition of optional expansion modules.

Specifications continued from first page.

ENVIRONMENT

Operating Temperature

-20 to 60 °C (-4 to 140 °F)

Shipping and Storage Temperature

-40 to 85 °C (-40 to 185 °F)

Humidity

5 to 95 % Non-condensing

Shipping and Vibration

ASTM D4169, Assurance Level II

MTTF

10+ years

AGENCY LISTINGS

US

FCC Part 15 Subpart B, Class B

FCC Part 15 Subpart C

UL 916

Canada

UL listed to Canadian Safety Standards (CAN/CSA 22.2) No. 205-M 1983 "Signaling Equipment"

Radio Standards Specification (RSS)

European Community

CE EN 61326-1

1999/5/EC R&TTE Directive

RoHS

China

CCC

SRRC

COMMUNICATIONS

2 isolated RS-485 ports with selectable bias and termination

2 10/100 Mbit Ethernet ports

USB type A connector, back-up and restore support

Wi-Fi (Client or WAP)

IEEE802.11a/b/g/n

IEEE802.11n HT20 @ 2.4GHz

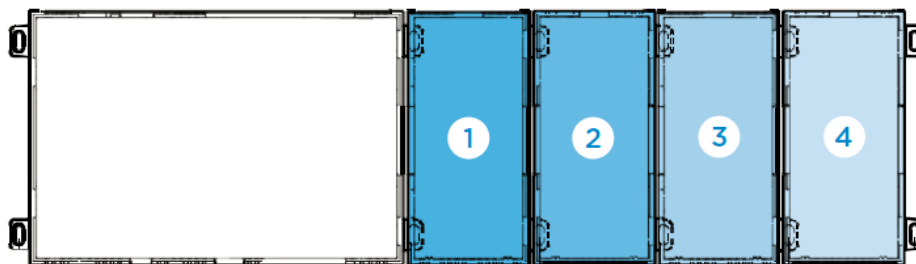
IEEE802.11n HT20/HT40 @ 5GHz

Configurable radio (Off, WAP, or Client)

WPAPSK/WPA2PSK supported

OPTIONAL MODULES

Maximum Combinations



Expansion 1	Expansion 2	Expansion 3	Expansion 4
232 or LON	232 or LON	232 or LON	232 or LON
485 x 2	232 or LON	232 or LON	232 or LON
485 x 2	485 x 2	232 or LON	
485 x 2	485 x 2		

Module Part Numbers

Part Number	Description	Maximum Supported
TRD-NPB-8000-LON	Single-Port LON FTT-10A Expansion Module	4
TRD-NPB-8000-232	Single-Port Electrically Isolated RS-232 Expansion Module	4
TRD-NPB-8000-2X-485	Dual-Port Electrically Isolated RS-485 Expansion Module	2
TRD-IO-16-485	Remote IO Module with RS-485	16

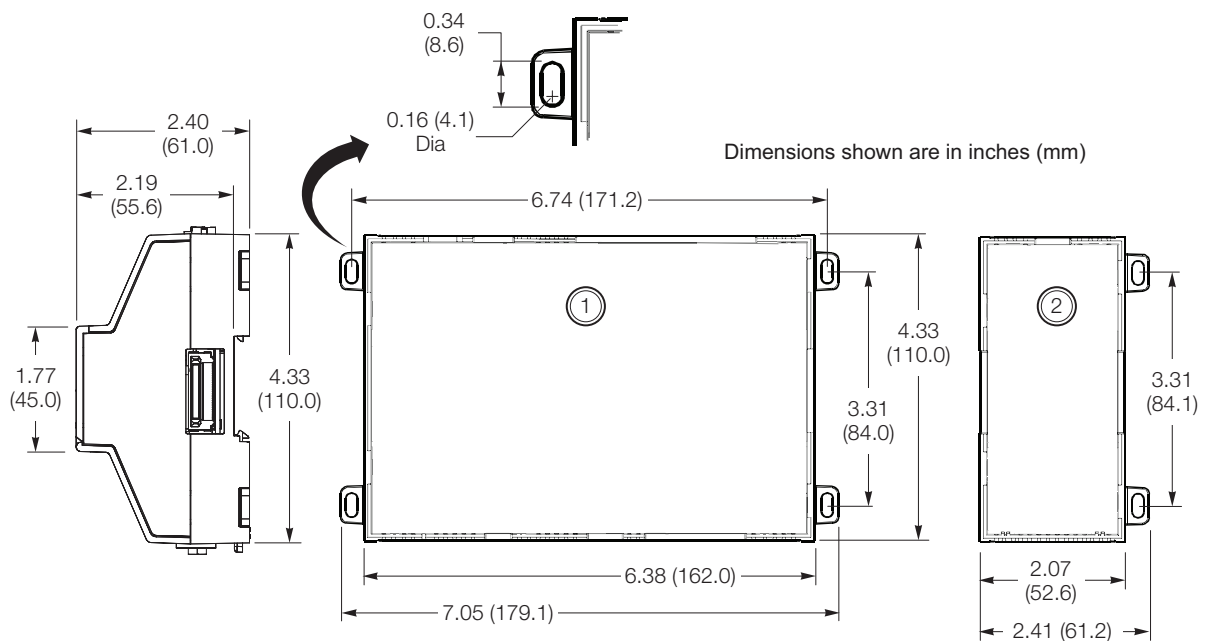
MODELS

Part Number	Description
TRD-JACE-8000	Base unit includes two isolated RS485 ports, two 10/100MB Ethernet ports, USB Backup and Restore, and Wi-Fi connectivity.
TRD-JACE-8000-DEMO	Base unit includes two isolated RS485 ports, two 10/100MB Ethernet ports, USB Backup and Restore, Wi-Fi connectivity, all available standard drivers, and a 500 device license. Hardware accessories purchased separately.
TRD-NC-8005	Up to 5 devices/250 point core.
TRD-NC-8010	Up to 10 devices/500 point core.
TRD-NC-8025	Up to 25 devices/1,250 point core.
TRD-NC-8100	Up to 100 devices/5,000 point core.
TRD-NC-8200	Up to 200 devices/10,000 point core.
TRD-DEVICE-10	Up to 10 devices/500 point upgrade (can be purchased during initial licensing).
TRD-DEVICE-25	Up to 25 devices/1,250 point upgrade (can be purchased during initial licensing).
TRD-DEVICE-50	Up to 50 devices/2,500 point upgrade (can be purchased during initial licensing).
TRD-DEVICE-UP-10	Up to 10 devices/500 point upgrade (can be purchased post initial licensing).
TRD-DEVICE-UP-25	Up to 25 devices/1,250 point upgrade (can be purchased post initial licensing).
TRD-DEVICE-UP-50	Up to 50 devices/2,500 point upgrade (can be purchased post initial licensing).
TRD-JACE-8000-AX	Enables JACE® 8000 controller to run Niagara AX (3.8U1). 3.8U1 Build with JACE 8000 controller support.
TRD-NPB-8000-2X-485	Add-on dual-port electrically isolated RS-485 expansion module for JACE 8000 controller.
TRD-NPB-8000-LON	Add-on single-port LON FTT-10A expansion module for JACE 8000 controller.
TRD-NPB-8000-232	Add-on single-port electrically isolated RS-232 expansion module for JACE 8000 controller.
TRD-WPM-8000	Universal power supply for JACE 8000 controller.

Part Number	Description
TRD-IO-16-485	Remote IO module, compatible with the JACE 8000 controller. Communication using RS 485, maximum IO supported by T-IO-16-485 modules: 16.
TRD-NPB-PWR	24V power supply for T-IO-16-485.
TRD-NPB-PWR-UN	Universal power supply for T-IO-16-485.

*All TRD-NC-8xxx parts include a Niagara 4 license and the standard driver suite.

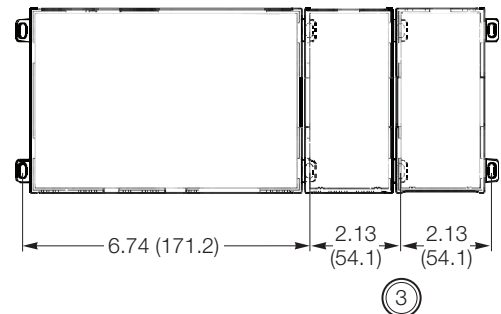
MOUNTING DIMENSIONS



Compatible with (DIN43880) enclosures.

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

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



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