

### **OVERVIEW**

The KMN-J-9000 is a compact, embedded Niagara Framework based controller and server platform for connecting multiple and diverse devices and sub-systems. The controller is designed as a Network Automation Controller optimized for BAS applications. With Internet connectivity and web-serving capability, the JACE 9000 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 connection or remotely over the Internet.

The controller is optimized for Niagara 4, which takes the Internet of Things "defense-in-depth" approach to security. In larger facilities, multi-building applications, and largescale control system integrations, Niagara 4 Supervisors can be used with JACE 9000 controllers to aggregate information, including real-time data, history, and alarms, to create a single, unified application.

#### LICENSING

For ultimate flexibility and expandability, the licensing model for the JACE 9000 controller includes standard Tridium drivers along with optional IO and field bus expansion modules. The controller requires requires a Software Maintenance Agreement (SMA) available for a 1-, 3-, or 5-year term. The initial maintenance license is a separate line item that must be chosen at the time of purchase.

### **SPECIFICATIONS**

- NXP iMX8M+ Quad Core CPU
- 2GB LPDDR4 RAM
- Removable 8GB micro-SD card
- USB type C connector for back-up and restore support
- (2) isolated RS-485 with switch-selectable bias and termination
- (2) 10/100MB Ethernet ports 24VAC/DC power supply
- Requires Niagara 4.13 or later
- Real time clock
- Batteryless
- Supports SSL and TLS encryption

# **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+

## **AGENCY LISTINGS**

- 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
- CCC
- SRRC
- RSS
- RoHS

### **EXPANSION & REMOTE IO MODULES**

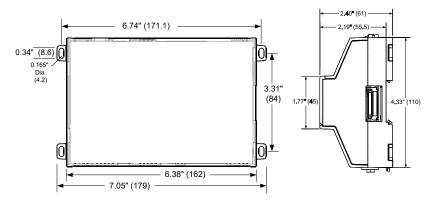
The JACE 9000 supports up to four expansion modules and up to 16 remote IO modules. See the JACE IO and Expansion modules data sheets for details.

MAXIMUM EXPANSION MODULES	MAXIMUM IO MODULES
NPB-8000-LON (4)	IO-R-16 (16)
NPB-8000-232 (4)	IO-R-34 (8)
NPB-8000-2X-485 (2)	

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## DIMENSIONS

Allow at least 1.5 inches (38 cm) clearance around all sides.



## **ORDERING INFORMATION**

#### **JACE and Options**

DESCRIPTION	MODEL
JACE 9000 licensed for 0 devices/0 points (includes one (1) IO-R-34)	KMN-J-934
JACE 9000 licensed for 5 devices/250 point core	KMN-J-9005
JACE 9000 licensed for 10 devices/500 point core	KMN-J-9010
JACE 9000 licensed for 25 devices/1,250 points	KMN-J-9025
JACE 9000 licensed for 100 devices/5,000 points	KMN-J-9100
JACE 9000 licensed for 200 devices/10,000 points	KMN-J-9200
JACE 9000 DEMO kit unit, licensed for 500 devices/25,000 points	KMN-J-9000-DEMO
Add 1 device/50 points	DEVICE-1
Add 10 devices/500 points	DEVICE-10
Add 25 devices/1,250 points	DEVICE-25
Add 50 devices/2,500 points	DEVICE-50
JACE 9000 100-240 volt universal power supply	WPM-8000

#### **Optional Modules**

DESCRIPTION	MODEL
Add-on dual port RS-485 expansion module for KMN-J-9000 controller	NPB-8000-2X-485
Add-on single port LON FTT10A expansion module for KMN-J-9000 controller	NPB-8000-LON
Add-on single port RS-232 expansion module for KMN-J-9000 controller	NPB-8000-232
Remote IO module, compatible with the JACE 9000 controller. Communication using RS-485. JACE can support up to 16 total IO-R-16 modules.**	IO-R-16
Remote IO module, compatible with the JACE 9000 controller. Communication using RS-485. JACE can support up to 8 total IO-R-34 modules.**	IO-R-34

\*\* Refer to the installation guide for various combinations of IO-R-16s and IO-R-34s.

## SUPPORT

Additional resources for installation, configuration, application, operation, programming, upgrading, and much more are available on the web at **www.kmccontrols.com**. To see all available files, log-in to the KMC Partners site.

