

JACE 8000

Controller

MODEL	DESCRIPTION
iSMA-B-J8	Embedded IoT controller and server platform



APPLICATION AND USE

The iSMA-B-J8 is a compact, embedded IoT controller (JACE 8000) and server platform for connecting multiple and diverse devices and sub-systems. With Internet connectivity and web server capability, the JACE 8000 controller provides an integrated control, supervision, data logging, alarming, scheduling, and network management. It streams data and rich graphical views to a standard web browser via 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 I/O 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.

FEATURES

- Niagara 4.1 and later
- Real-time clock
- 2 isolated RS485 ports with selectable bias and termination
- 2 Fast Ethernet ports
- Optional expansion modules
- Support of a wide range of protocols: LON, BACnet, KNX-IP, Modbus, M-Bus, SNMP, Z-Wave, and others
- Real-time data, history, and alarms
- Removable microSD card with 4 GB flash total storage/2 GB user storage
- Complete network management of devices based on LONworks technology
- Built-in web server, which provides a graphical user interface available from a web browser level
- Different licensing models for various application types

TECHNICAL SPECIFICATION

DESCRIPTION		JACE 8000
Power supply	Voltage	24 V AC/DC
RS485-A/B	RS485 interface	Up to 32 devices
	Ports	With selectable bias and termination
	Baud rate	Screw connectors
PRI/SEC	Ethernet interface	4800-115200
	Baud rate	2 RJ45 ports
USB	Prog	10/100 Mb/s
	Debug	USB 2.0
WiFi	WiFi adapter	micro A USB
Operating system	OS	IEEE 802.11a/b/g/n standard
	Engine	Operating system QNX RTOS
		Oracle hotspot Java Virtual Machine

The performances stated in this sheet can be modified without any prior notice.

DESCRIPTION		JACE 8000
Operating system	Framework	Niagara 4.1 and later
	Clock	Real-time clock
Platform	Processor	TI AM3352: 1000 MHz ARM® Cortex™-A8
	Memory	1 GB DDR3 SDRAM
	Storage	Removable microSD card – 4 GB (flash total storage/2 GB user storage)
Pollution degree	Pollution degree rating	3
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-20°C to +60°C (-4°F to 140°F)
Humidity	Relative	5 to 95% RH (without condensation)
Screw connectors	Maximum cable size	18-22 AWG
Housing	Material	Plastic, internal air circulation, for indoor installation
	Mounting	DIN rail mounting 4 screw holders
Dimensions	Width	162.00 mm/6.38 in
	Length	110.00 mm/4.33 in
	Height	61.00 mm/2.40 in

EXPANSIONS

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		



iSMA-B-J8-LON-1



iSMA-B-J8-232-1



iSMA-B-J8-485-2

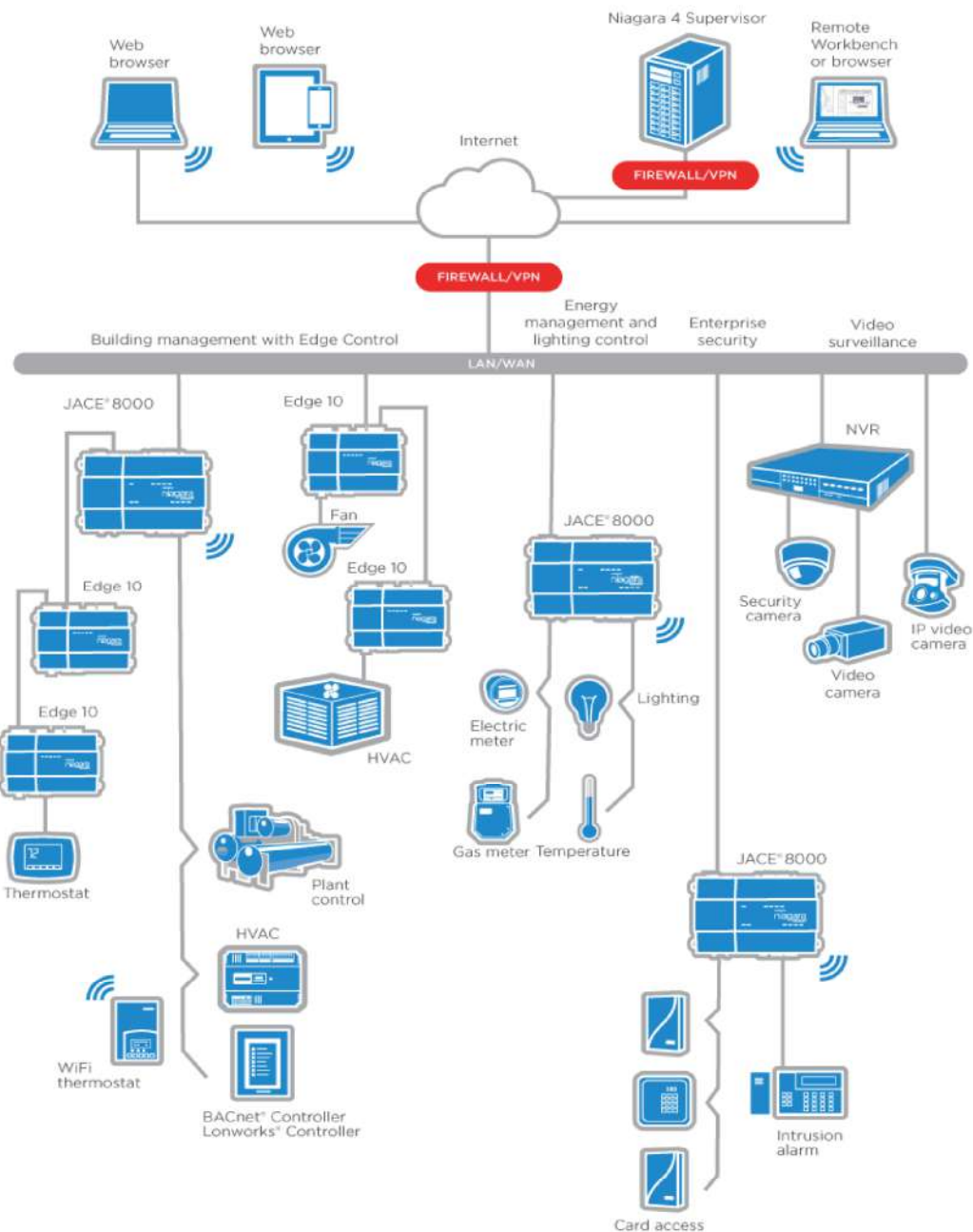
NIAGARA 4 DRIVERS

- BACnet IP
- BACnet MS/TP
- FOX
- KNX-IP
- LON
- M-Bus
- All types of Modbus
- oBIX
- Open ADR
- SNMP

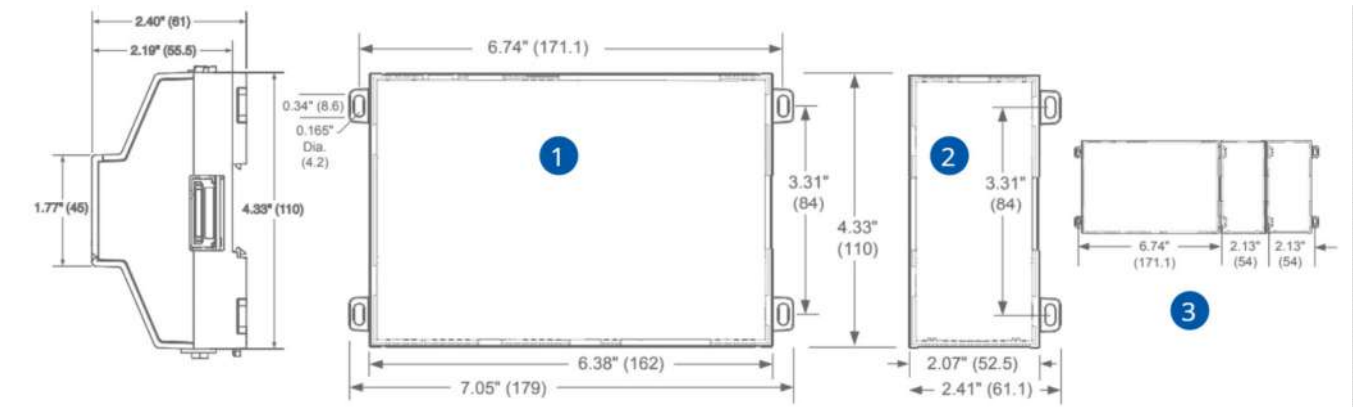
ORDERING CODES

iSMA-B-J8-100	Complete network controller with 18 months upgrade subscription and up to 100 proxy points service
iSMA-B-J8-250	Complete network controller with 18 months upgrade subscription and up to 250 proxy points service
iSMA-B-J8-500	Complete network controller with 18 months upgrade subscription and up to 500 proxy points service
iSMA-B-J8-1250	Complete network controller with 18 months upgrade subscription and up to 1250 proxy points service
iSMA-B-J8-5K	Complete network controller with 18 months upgrade subscription and up to 5000 proxy points service
iSMA-B-J8-10K	Complete network controller with 18 months upgrade subscription and up to 10000 proxy points service
iSMA-B-J8-LON-1	Expansion module with single FTT10A port
iSMA-B-J8-485-2	Expansion module with 2 RS485 ports
iSMA-B-J8-232-1	Expansion module with single RS232 port

APPLICATION EXAMPLE



DIMENSIONS [mm]



1 - iSMA-B-J8 controller

Warning:

At least 38 mm (1.5 in) of free space needs to be left around the controller, and at least 76 mm (2.99 in) from the bottom for Wi-Fi antenna.

2 - Expansion module (maximum 4 modules can be used)

3 - Distances between centers of joined elements