

JENESys® Edge™ 414

PRODUCT DATA SHEET



powered by
niagara
framework®

Made in USA

JENESys Edge 414 Specifications

- ✓ Powered by N4 a Niagara Framework
- ✓ JENESys® represents an Open NiCS
- ✓ Uses Standard Niagara 4 drivers
- ✓ Primarily uses the Niagara FOX IP Protocol Supporting up to 25 controllers on a single Spanning Tree IP Protocol Network
- ✓ Compatible with BACnet IP & BACnet MS/TP, Modbus TCP & RTU Networks
- ✓ Capable of Stand-Alone Operation
- ✓ Web Browser HMI Included
- ✓ Field configurable and programmable using a Web Browser or ProBuilder/Workbench
- ✓ Fully Programmable in Niagara
- ✓ 14 Total Inputs/Outputs On-Board:
 - 4 Digital Outputs
 - 4 Analog Outputs
 - 6 Universal Inputs
- ✓ Standard RS-485 Multi-Drop Communication Bus
- ✓ 4G eMMC Flash Memory
- ✓ 1GHz AM335x ARM Cortex A8 Processor
- ✓ 35 mm DIN rail or flat panel mounting

The JENESys Edge 414 is a Niagara 4, IP Programmable Controller with 14 IO points (Inputs and Outputs) on board.

The controller is ideal for terminal equipment control that requires minimal integration with third party products (max 3) and minimal points of control (max 50).

The unit blends the adaptability and flexibility of a freely IP programmable device. Built on Lynxspring's extensible Onyx® IP hardware platform and Niagara 4 with a 50 point 3-device license, the JENESys Edge 414 enables users to utilize Niagara ProBuilder /Workbench software, Niagara programming tools and the FOX Protocol for easy setup, programming, commissioning and control. Each JENESys Edge 414 includes perpetual Niagara software maintenance.

Three (3) expansion modules (Onyx XM34IO) can be added to the unit adding 102 IO points, for a total of 116 IO and a maximum of 50 IO points used.

The JENESys Edge 414 allows users to maximize their investment in Niagara and make use of a single layer/one platform, IP architecture across the entire building for real-time access and control. Users experience faster deployment times, reduced setup and management costs, reduced complexity and have the ability to add their own value-added applications.

Warranty

All products and services purchased through Lynxspring are warranted for a period of eighteen (18) months from date of shipment (the "Warranty Period") unless otherwise noted in a Limited Warranty included with a Product. The Warranty Period does not cover damage by abuse, accident, misuse, neglect, alteration, self-repair, improper installation, failure of supporting products and systems including electric power or exposer to conditions that exceed the Product stated recommendations. For Complete warranty information, please refer to Lynxspring's Terms and Conditions of Product Sale.

Mounting

The controller enclosure is UL plenum rated and constructed of a plastic base plate and a plastic factory cover. The cover does not need to be removed from the base plate for either mounting or wiring. Removable terminal blocks are used for all wiring connections, which allow the controller to be wired before or after mounting. The controller can be mounted in any orientation. Ventilation openings are designed into the cover to allow proper heat dissipation, regardless of the mounting orientation. NOTE: The controller must be mounted in a position that allows clearance for wiring, servicing, and removal.

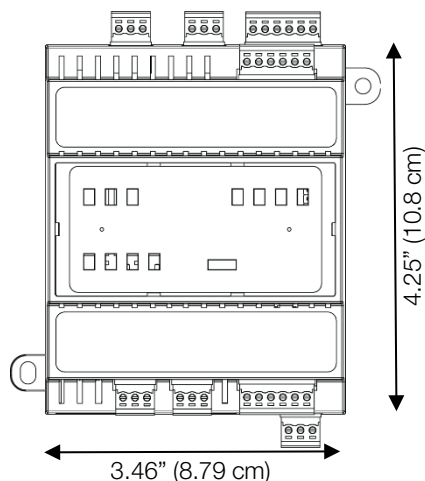
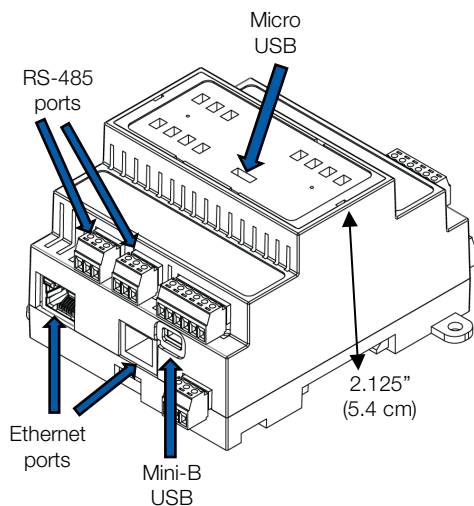
Features

- ✓ Rugged and robust design
- ✓ Full Niagara 4 Stack
- ✓ Linux OS
- ✓ Compact footprint
- ✓ Includes the following Tools with Reporting:
 - Configuration
 - Auto IP Addressing
 - Remediation/Patching
 - Continuous Commissioning
- ✓ Report results through Niagara
- ✓ Lower maintenance requirements as compared to the other systems
- ✓ Energy efficient
- ✓ Manufactured in the USA

Ancillary Parts

- ✓ Wall and duct sensors
- ✓ Conference Room Communicating Stats

Dimensions



Specifications

PLATFORM

Operating System	Helixx [®] Framework by Lynxpring [®] and Niagara [®] 4
Processor	1 GHz AM335x ARM Cortex A8
Memory	512 MB DDR3L 800 MHz, 4 GB 8-bit Embedded MMC on-board Flash
Real-Time Clock (RTC)	Battery-powered clock included to store description/setup values including: year, month, date, hours, minutes and seconds.

COMMUNICATION PORTS

2 Ethernet Ports	10/100 Mbps (RJ-45 Connector) bridged for Spanning Tree Protocol
2 RS-485 Ports	RS-485 serial port with 3-screw connector
Mini-B USB	USB Client Connector utilizes 5-pin Mini-B USB cable
Micro USB	Serial shell access
Onyx Network	3-wire (LxH LxL SHLD) high-speed differential serial signal

INPUTS AND OUTPUTS

6 Universal Inputs	Type-3 10 K ohm thermistors; resistance 0-100 K ohms; 0-10 Vdc; 0-20 mA using a 499-ohm resistor; pulse input: up to 500 Hz; 12-bit A/D resolution
4 Digital Outputs	Form A contacts, 24 V at 0.5 A
4 Analog Outputs	0-10 Vdc
Connector Screw Size	3/32" slotted
Supported Wire Size	28-16 AWG
Housing	UL94V-0

POWER

Power Input	External 24 Vac/dc +10%/-10% 50/60Hz, minimum 18 VA/device
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CHASSIS

Construction	Base: Plastic, DIN rail or screw mount	Cover: Plastic
Cooling	Internal air convection	
Dimensions	3.46" (8.79 cm) width x 4.25" (10.8 cm) length x 2.125" (5.4 cm) depth	
Mounting	Flat panel and 35 mm DIN rail mounting options standard	

ENVIRONMENT

Operating Temperature	0 – 60 °C (32 –140 °F)
Storage Temperature	0 – 70 °C (32 –158 °F)
Relative Humidity Range	5 – 95% RH, non-condensing

CERTIFICATIONS

Compliance	Pending: FCC 47CFR Parts 15B and 18, EN 55022, EN 55011, ICES-003, RoHS, UL 916, CSA C22.2 No. 205-12, EN 61010-1: 2010, IEC 61010-1, 3rd edition
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WEIGHT

JENE-EG414	0.6 pounds	Product and Packaging	0.8 pounds
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Ordering Information

PART NUMBER(S)	DESCRIPTION
JENE-EG414	Packaging will include one (1) JENEsys Edge 414 Controller (LICENSE WITH MAXIMUM OF 50 POINTS, 3 DEVICES)

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