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 Onyxx® 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 (Onyxx 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
## Specifications

<table>
<thead>
<tr>
<th>Platform</th>
<th><strong>Helix® Framework by Lynxspring® and Niagara®</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>1 GHz AM335x ARM Cortex A8</td>
</tr>
<tr>
<td>Memory</td>
<td>512 MB DDR3L 800 MHz, 4 GB 8-bit Embedded MMC on-board Flash</td>
</tr>
<tr>
<td>Real-Time Clock (RTC)</td>
<td>Battery-powered clock included to store description/setup values including: year, month, date, hours, minutes and seconds.</td>
</tr>
</tbody>
</table>

### 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

### 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

### Weight

- **JENE-EG414**: 0.6 pounds
- **Product and Packaging**: 0.8 pounds

### Ordering Information

<table>
<thead>
<tr>
<th>Part Number(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JENE-EG414</td>
<td>Packaging will include one (1) JENEsys Edge 414 Controller (LICENSE WITH MAXIMUM OF 50 POINTS, 3 DEVICES)</td>
</tr>
</tbody>
</table>