Deliver the Reliability of Niagara 4 and 4G LTE to the Edge

Lynxspring’s Edge Enabled™ JENEsys Edge 534 – 4G LTE brings together the JENEsys Edge 534, Niagara IP programmable controller and the addition of built-in 4G LTE cellular connectivity and capabilities.

This multi-purpose controller combines the full features and functionality of Niagara 4 utilizing Niagara ProBuilder/Niagara Workbench software, Niagara 4 programming tools and Fox Protocol with the capability and advantages of 4G LTE cellular. The JENEsys Edge 534 – 4G LTE provides an efficient and easy way to implement on-demand, reliable cellular connectivity to enable remote access, control and management on an embedded, programmable controller.

The unit supports secure, bi-directional communication, remote access and the exchange of data among today’s intelligent buildings, equipment, edge devices and Cloud services. It enables users to remotely access, monitor and control systems and equipment through Niagara 4 and have access to building and equipment data through a dedicated secure VPN service from Verizon.

E2E Private Wireless Network and the E2E Easy Data Service Plan

The JENEsys Edge 534 – 4G LTE is packaged with an available, purpose-built Verizon for data traffic only, Private Wireless Network and Lynxspring’s E2E Easy Data Service Plan. With the reliability, coverage, security and simplicity of this cellular data plan, the JENEsys Edge 534 – 4G LTE has been designed for easy set-up, installation, commissioning and includes a cellular modem interface allowing instant communication upon startup.

Refer to the E2E Easy Data Service Plan document and Agreement for additional information.
### Specifications

<table>
<thead>
<tr>
<th><strong>Platform</strong></th>
<th>JENEsys® Edge™ 534 – 4G LTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Helixx® Framework by Lynxspring® and Niagara 4.4/4.6/4.7</td>
</tr>
<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)
- 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

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

#### Power

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

#### Chassis

- **Construction**: Base: Plastic, DIN rail or screw mount
- **Cooling**: Internal air convection
- **Dimensions**: 4.5” (11.43 cm) width x 4.25” (10.8 cm) length x 2.25” (5.72 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**: Approved: FCC 47 CFR Parts 15C and 18, EN 55022, EN 55011, ICES-003, RoHS, UL 916, CSA C22.2 No. 205-17, EN 61010-1: 2010, IEC 61010-1, 3rd edition
- **RF Exposure/Specific Absorption Rate (SAR)**: This product has been evaluated for SAR and meets the FCC guidelines for exposure to radio waves.
- **FCC Equipment Authorization ID**: QPELS31-V

#### Weight

- **JENE-EG534-4G**: 0.9 pounds
- **Product and Packaging**: 1.6 pounds

#### Ordering Information

<table>
<thead>
<tr>
<th><strong>Part Number(s)</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>JENE-EG534-4G-100U</td>
<td>Packaging will include one (1) JENEsys Edge 534 – 4G LTE Controller (LICENSE WITH MAXIMUM OF 100 POINTS, UNLIMITED DEVICES)</td>
</tr>
<tr>
<td>JENE-EG534-4G-300U</td>
<td>Packaging will include one (1) JENEsys Edge 534 – 4G LTE Controller (LICENSE WITH MAXIMUM OF 300 POINTS, UNLIMITED DEVICES)</td>
</tr>
<tr>
<td>JENE-EG534-4G-1250</td>
<td>Packaging will include one (1) JENEsys Edge 534 – 4G LTE Controller (LICENSE WITH MAXIMUM OF 1,250 POINTS, 25 DEVICES)</td>
</tr>
<tr>
<td>HDR-30-24</td>
<td>Power Supply for one 534 and one XM</td>
</tr>
<tr>
<td>HDR-60-24</td>
<td>Power Supply for one 534 and three XMs</td>
</tr>
<tr>
<td>HDR-100-24</td>
<td>Power Supply for one 534 and eight XMs</td>
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</tbody>
</table>
Connect & Access Data – Anytime, Anywhere
The JENERsys Edge 534 – 4G LTE delivers edge connectivity, data access and control for today’s small to mid-sized facilities, plant control, machine-to-machine and IoT applications that require smart edge technology.

Reduce Engineering Time & Installation Costs
The JENERsys Edge 534 – 4G LTE combines Niagara 4 and Onyxx™, a proven IoT edge hardware platform, enabling facility managers, operators, system integrators and contractors to use a known user interface (Niagara 4 ProBuilder/Workbench) to achieve operational efficiencies between multiple systems and/or devices, facility management functions, equipment control and business applications.

Cellular Modem
The JENERsys Edge 534 – 4G LTE features NimbeLink’s Skywire® LTE CAT 1 embedded cellular modem. This modem is specifically designed to meet the challenge of connecting devices to cellular networks. It is designed for deployment on the Verizon LTE network and is certified, enabling easy integration with no further carrier testing requirements.

Cellular Modem Features
✓ Low power requirements
✓ No additional carrier certification required
✓ FCC, Verizon ODI approved and certified
✓ RoHS compliant
✓ End-device certified, which enables easy integration with no further carrier testing requirements
✓ Network Stack support – integrated TCP/IP, UDP/IP, HTTP/HTTPS, FTP, SMTP, IPv4/IPv6, NITZ, PING, PPP Stacks, SMS over IMS
✓ Power supply voltage 3 V – 5.5 V (3.8 V nominal); I/O voltage 1.65 V – 5.5 V; current consumption average 135 mA, peak 700 mA, idle 48 mA, sleep 8.6 mA