What is the JENEsys® Edge™?

JENEsys Edge is a new generation of IoT controllers, combining the Niagara Framework® with Lynxspring’s Onyxx® platform. A first-of-its-kind, the JENEsys Edge 534 – N4 is a fully programmable Niagara 4 controller with 34 IO built in and expandable IO available, delivering edge connectivity, interoperability, data access and analytics for today’s buildings, energy management, machine-to-machine applications and IoT environments. Taking Niagara 4 to the edge with real-time control—the JENEsys Edge 534 – N4 utilizes the same familiar ProBuilder/Workbench software, Niagara 4 programming tools and Fox Protocol.

Who are typical users of the JENEsys Edge 534 – N4?

Designed to provide maximum performance at minimum cost, the JENEsys Edge 534 – N4 utilizes the Fox protocol so that it can easily be used as a standalone controller, or integrated into other Niagara 4 solutions. It is perfect for both retrofit and new construction projects, small to mid-sized commercial buildings, and applications in retail, hotels, schools, churches, and health care clinics.

What business/use cases does the JENEsys Edge 534 – N4 resolve?

The JENEsys Edge 534 – N4 enables you to access data from different sources, make it consistent across multiple applications, have more capacity, offer higher levels of data processing and increased storage capabilities, and add a level of command and control. In addition, connect a JENE-EG534-N4 to up to 8 additional extender modules (Onyxx XM34IO), adding 34 points of IO each, for a maximum of 306 points. The JENEsys Edge 534 – N4 licensing is well-suited to take Niagara 4 into smaller or mid-sized and price-sensitive applications.

What are the features of the JENEsys Edge 534 – N4?

Built on Niagara 4 and Onyxx® (an extensible platform), the JENEsys Edge 534 – N4 runs Niagara 4 on the edge and is compatible with many existing Niagara 4 drivers, including the Niagara 4 Network (Fox), BACnet, Modbus, Web and oBIX. The JENEsys Edge 534 – N4 leverages global capacity licensing and runs on a real-time Linux OS with a fast processor and increased memory capacity. The JENEsys Edge 534 – N4 also includes a GUI for building your own internal graphics. The JENEsys Edge 534 – N4 has a unit footprint smaller than a JACE®. For more feature information, please refer to the Data Sheet.

What are the benefits of the JENEsys Edge 534 – N4?

Connectivity, data access and control—anytime, anywhere. The JENEsys Edge 534 – N4 reduces engineering time and installation costs. With 34 points of IO on-board, the JENEsys Edge 534 – N4 is a powerful gateway between systems. It enables small to mid-sized facilities to have an economical Niagara 4 solution to meet their needs.

Note: Add to a JENE-EG534-N4, up to 8 additional extender modules (at 34 points of IO each) for a maximum of 306 points.
What drivers are built-in or will work with the JENEsys Edge 534 – N4?
The JENEsys Edge 534 – N4 is a full-featured Niagara 4 controller. Drivers included are: Modbus RTU/TCP, BACnet IP/BACnet MS/TP, oBIX, Fox and Web UI. In the future, it will include some third-party drivers.

Is a LON driver included on the JENEsys Edge 534 – N4?
Yes, LON IP.

Can the JENEsys Edge 534 – N4 be used with a LynxLCD?
Yes, however, the JENEsys Edge 534 – N4 is not equipped with the RJ-11 port necessary to connect a LynxLCD. An RS-485 to RJ-11 adapter is required.

Is the JENEsys Edge 534 – N4 easy to install?
Yes. The JENEsys Edge 534 – N4 will fit in most areas and can be conveniently mounted with or without DIN rail. For further instructions, please refer to the Installation Guide.

Does the JENEsys Edge 534 – N4 support Web UI? Can I create PX (or similar web pages) on it directly?
Yes.

Will all standard Niagara 4 drivers be available and run on the JENEsys Edge 534 – N4?
Yes, everything is included. However, the NRIO, NDIO and BACnet Ethernet modules are not supported. For additional information, refer to our Onyxx XM 34IO documentation.

What is the Onyxx Network?
It’s a new network created to manage communication between Onyxx capable devices. It’s a two-wire differential serial bus that resides on the units.

How does the JENEsys Edge 534 – N4’s horsepower compare with the JACE 8000?
They have similar attributes and specifications.

Will there be any provisions for adding more features similar to the expansion cards that are on the JENE/JACE platform?
Yes, there are multiple PCB slots within the JENEsys Edge 534 and Onyxx XM 34IO modules that allow for additional features to be added from the factory.

How is the JENEsys Edge 534 – N4 licensed?
The JENEsys Edge 534 – N4 follows the same licensing model as any N4-compatible controller, with some minor differences. Onyxx devices and points are enabled by a ‘driver capacity IO’ feature, rather than the ‘global capacity’ feature. The features are set for unlimited devices with a choice of 100 or 300 points each, up to 25 devices with 1,250 points each, or up to 100 devices with 5,000 points each on our licenses. Points can be added to the global capacity feature in 25-point increments (JENE-EG-UP25), and driver capacity IO feature in 100-point increments (JENE-EG-UP100-N4). A software maintenance agreement is still required for the initial twelve months.

What is the limit of IO that I can have on a JENEsys Edge 534 – N4?
306 total.
How is the Onyxx XM 34IO connected to a JENEsys Edge 534 – N4? Is there a maximum distance?

They can be connected by their Onyxx Network ports. Daisy chain them with 2-wire shielded twisted pair cable. Total bus length cannot exceed 30 feet.

On the JENEsys Edge 534 – N4, can the BACnet points be pre-configured to have unique, application-specific names? (HWValveMod vs. AO8)?

Absolutely, the JENEsys Edge 534 – N4 functions as a standard BACnet device, so it can be treated like any other BACnet device.

Are the connectors removable?

Yes.

What is the connector screw size? What is the supported wire size?

Connector screw size: 3/32 slotted
Supported wire size: 28-16 AWG

Does the JENEsys Edge 534 – N4 have built-in Wi-Fi?

Not currently.

Are there opportunities to rebrand the JENEsys Edge 534 – N4?

Yes, contact Lynxspring’s sales team at (816) 347-3500.

Is the JENEsys Edge 534 – N4 made in the USA?

Yes.