

JENE-EG514 Fully Programmable IP Controller



What is the JENEsys® Edge™ 514?

Built on the company's extensible Onyxx® IP hardware platform and powered by the Niagara Framework®, the JENEsys Edge 514 is a fully programmable and licensed Niagara field and equipment controller with 14-IO (Inputs and Outputs) on board and expandable IO through the accompanying XM extension modules. The JENEsys Edge 514 is part of our growing Edge portfolio of controllers.

Leveraging the same Niagara Framework programming tools, Workbench and Fox Protocol, the JENEsys Edge 514 enables you to maximize your investment in Niagara and make use of a single layer and one platform across the entire building architecture. In addition, you'll experience faster deployment times, reduced setup and management costs, reduced complexity and have the ability to add your own value-added applications.

Who are typical users of the JENEsys Edge 514?

The unit is ideal for today's small to mid-sized facilities, multi-site environments, plant and equipment control such as air handling units, roof top units, boilers, fan coil units, heat pumps and more and machine-to-machine applications. This powerful unit meets today's requirements to connect, manage and control closer to where the data actually is whether it be equipment, a single facility or a multi-site environment. The versatility, functionality and broad footprint of the JENEsys Edge 514 using the industry's most widely deployed platform makes this a powerful, cost-effective and economical solution.

The JENEsys Edge 514 can easily be 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 514 resolve?

The JENEsys Edge 514 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-EG514 to up to 8 additional extender modules (Onyxx XM34IO), adding 34 points of IO each, for a maximum of 286 points. The JENEsys Edge 514 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 514?

Built on Niagara 4 and Onyxx® (an extensible platform), the JENEsys Edge 514 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 514 leverages global capacity licensing and runs on a real-time Linux OS with a fast processor and increased memory capacity. The JENEsys Edge 514 also includes a GUI for building your own internal graphics.

- Fully programmable and licensed Niagara field and equipment controller with 14 IO (inputs and outputs) on-board
- Runs the full Niagara stack
- Leverages Niagara programming tools, Workbench and Fox Protocol
- Maximizes your investment in Niagara
- No new training or certification needed
- Make use of one universal platform across an entire architecture
- Flattens the BAS/controls architecture
- Create a complete Niagara network from the Edge to Enterprise
- Easily connects to a Niagara Supervisor, Enterprise and Cloud
- Superior flexibility, expandability and comprehensive capabilities
- Configure in a variety of ways

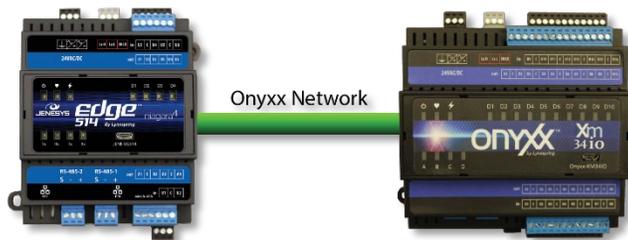
JENEsys® Edge™ 514

FREQUENTLY ASKED QUESTIONS

- Integrates with other building applications
- Quick deployment times, reduced setup and operational cost
- Add your own value-added applications
- Easy to connect to and upgrade to existing systems
- Mountable on walls, DIN-rails or panels

What are the benefits of the JENEsys Edge 514?

Connectivity, data access and control—anytime, anywhere. The JENEsys Edge 514 enables you to maximize your investment in Niagara and make use of a single layer and one platform across the entire building architecture. In addition, you'll experience faster deployment times, reduced setup and management costs, reduced complexity and have the ability to add your own value-added applications.



Note: Add to a JENE-EG514, up to 8 additional extender modules (*at 34 points of IO each*) for a maximum of 286 points.

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What drivers are built-in or will work with the JENEsys Edge 514?

The JENEsys Edge 514 is a full-featured Niagara 4 controller. Drivers include: 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 514?

Yes, LON IP.

Can the JENEsys Edge 514 be used with a LynxLCD?

Yes, however, the JENEsys Edge 514 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 514 easy to install?

Yes. The JENEsys Edge 514 can be installed easily on walls, DIN-rails, or panels and will fit in most areas. For further instructions, please refer to the Installation Guide.

Does the JENEsys Edge 514 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 514?

Yes, everything is included. However, the NRIO, NDIO and BACnet Ethernet modules are not supported. For additional information, refer to our Onyx XM 3410 documentation.

What is the Onyx Network?

It's a network created that has been specifically developed to manage communication between Onyx capable devices. It's a two-wire differential serial bus that resides on the units.

How does the JENEsys Edge 514'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 514 and Onyx XM 34IO modules that allow for additional features to be added from the factory.

How is the JENEsys Edge 514 licensed?

JENE-EG514-100 Packaging will include one (1) JENEsys Edge 514 Controller
(LICENSE WITH MAXIMUM OF 100 POINTS, 5 DEVICES)

JENE-EG514-300 Packaging will include one (1) JENEsys Edge 514 Controller
(LICENSE WITH MAXIMUM OF 300 POINTS, 5 DEVICES)

What is the limit of IO that I can have on a JENEsys Edge 514?

286 total when paired with maximum number of 8 Onyx XM 34IOs.

How is the Onyx XM 34IO connected to a JENEsys Edge 514? Is there a maximum distance?

They can be connected by their Onyx Network ports and chained with 2-wire shielded twisted pair cable. Total bus length should not exceed 30 feet.

On the JENEsys Edge 514, can the BACnet points be pre-configured to have unique, application-specific names? (HWValveMod vs. AO8)?

Absolutely, the JENEsys Edge 514 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 514 have built-in Wi-Fi?

Not currently.

Are there opportunities to rebrand the JENEsys Edge 514?

Yes, contact Lynxpring's sales team at (816) 347-3500 or sales@lynxpring.com.

Is the JENEsys Edge 514 made in the USA?

Yes.

How does the JENEsys Edge 514 compare to the JENEsys Edge 534?

The JENEsys Edge 514 has the same general capabilities, same processor, and memory as the JENEsys Edge 534, but with fewer built-in I/O's (14 vs 34) and a smaller form factor.

Can I use the JENEsys Edge 514 in VAV applications?

A separate VAV application-specific model that includes a pressure sensor will be released soon.

Which versions of Niagara 4 is the JENEsys Edge 514 compatible with?

Currently, Niagara 4.2.36 is the only compatible version. Niagara 4.4, 4.6, and 4.7 compatibility will be available very soon.