Niagara Edge 10

Frequently Asked Questions

Q: Where can I find specification detail on the Niagara Edge 10?

A: You can find the data sheet and other collateral posted in the Resource Library on tridium.com. Technical documentation, including dimensions, agency listings, IO mixture, input and output power specification, environmental specifications and more, is posted on the Niagara Community website.

Q: How many points of IO does the Niagara Edge 10 have?

A: The Niagara Edge 10 has 10 points of IO. Specifically, 5 universal inputs, 3 digital outputs and 2 analog inputs. See the data sheet posted in the Resource Library on tridium.com for more detail.

Q: Does the Niagara Edge 10 support 20Hz pulse inputs?

A: No, the Niagara Edge 10 does not support 20Hz pulse inputs. See the data sheet posted in the Resource Library on tridium.com for more detail on the universal inputs available.

Q: Are the digital outputs relay or triac?

A: The Niagara Edge 10 has 3 digital outputs that are triacs rated for 24VAC @ .5 amps.

Q: Does the Niagara Edge 10 have Wi-Fi capabilities?

A: No, the Niagara Edge 10 does not have Wi-Fi capabilities. The Niagara Edge 10 is WIRED IP only.

Q: Does the Niagara Edge 10 have an SD card like the JACE® 8000?

A: No, the Niagara Edge 10 does not have a SD card. The Niagara Framework® software is loaded directly onto the Niagara Edge 10.

Q: Does the Niagara Edge 10 have an internal battery?

A: No, the Niagara Edge 10 does not have an internal battery. The Niagara Edge 10 must be powered via a Universal Power Supply (UPS), should operation during power failures be a requirement.

Q: How many RS-485 serial ports does the Niagara Edge 10 have?

A: The Niagara Edge 10 has a single non-isolated RS-485 serial port. The port can be used to connect a single IO-R-34 or up to 3 Modbus or BACnet devices.

Q: Does the Niagara Edge 10 have a RS-232 port?

A: No, the Niagara Edge 10 does not have a RS-232 port.

Q: Does the Niagara Edge 10 support LON?

A: No, the Niagara Edge 10 does not support LON. The Niagara Edge 10 includes drivers for BACnet, Modbus and SNMP only.

Q: Can the Niagara Edge 10 support the JACE expansion modules?

A: No, the Niagara Edge 10 is unable to support the JACE expansion modules (NPB-8000-2x-485, NPB-8000-LON, NPB-8000-232).

Q: What version of the Niagara Framework is needed for the Niagara Edge 10?

A: The Niagara Edge 10 supports Niagara 4.7 or later.

Q: Does the Niagara Edge 10 support Niagara AX?

A: No, the Niagara Edge 10 supports Niagara 4.7 or later.

Q: Does the Niagara Edge 10 run the full version of Niagara?

A: Yes, the Niagara Edge 10 runs the full version of Niagara. All features and functionality of Niagara are available in the Niagara Edge 10.

Q: Can I purchase the Niagara Edge 10 without Niagara software included?

A: No, the Niagara Edge 10 is a bundled product and includes both the hardware and software.

Q: Does the Niagara Edge 10 require an SMA?

A: No, an SMA purchase is not required nor available. The Niagara Edge 10 includes all software updates released for commercial use by Tridium for the life of Niagara 4, but not for any later versions.

Q: How is the Niagara Edge 10 licensed?

A: The Niagara Edge 10 comes with a license that includes 3 devices and/or 50 points. The Niagara Edge 10 includes BACnet, Modbus and SNMP drivers. The Niagara Edge 10 does not have any option or upgrade packs to increase the number of points or devices.

Q: Can I add more points or devices to my license?

A: No, the Niagara Edge 10 comes with a standard license that includes 3 devices and/or 50 total points. The Niagara Edge 10 does not have any option or upgrade packs to increase the number of points or devices.

Q: Can I add drivers to the Niagara Edge 10?

A: No, the Niagara Edge 10 is limited to BACnet, Modbus and SNMP. No other drivers are supported on the Niagara Edge 10.

Q: What standard drivers are included with the Niagara Edge 10?

A: The Niagara Edge 10 comes with standard drivers for Modbus, BACnet and SNMP. These drivers can be used for both serial and IP connections where applicable.

Q: How many external devices can I connect via the IP or RS-485 serial network on the Niagara Edge 10?

A: The Niagara Edge 10 supports 3 devices or up to 50 total points on the IP and/or RS-485 serial network.

Q: How many IO R modules can I connect to the Niagara Edge 10?

A: You may connect two IO-R-34 modules to the Niagara Edge 10.

Q: Can I connect an IO-R-16 to the Niagara Edge 10?

A: Yes, the Niagara Edge 10 supports up to four (4) IO-R-16 modules.

Q: Does the IO-R-34 consume capacity from my Niagara Edge 10 core license?

A: No, the IO-R-34 operates over the NRIO network (Niagara Remote IO network), which, like niagaraDriver, is excluded from capacity restrictions on the Niagara Edge 10.

Q: What is the default IP address for the Niagara Edge 10?

A: Upon first startup when IP connectivity is detected, the Niagara Edge 10 initially requests an IP address via DHCP. If a DHCP address is not found, the Niagara Edge 10 falls back to a static IP address based on its serial number.

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Q: How can I determine the fallback static IP address of my Niagara Edge 10 based on its serial number?

A: The static IP address is determined based on the the serial number. The IP address will be set to 192.168.1xx.xx, where xx.xx is the last 4 digits of the serial number. For example, if the serial number is 123456789, the fallback IP address would be 192.168.167.89.

Q: What is the subnet mask of my fallback static IP address?

A: 255.255.0.0

Q: The Niagara Edge 10 includes two Ethernet ports, how are they different than the JACE 8000?

A: The JACE 8000 has two Ethernet ports that are isolated, meaning that they cannot route data between the two ports and are not capable of daisy chaining. The Niagara Edge 10 includes two Ethernet ports that are capable and by default will route data between the two ports to allow for daisy chaining.

Q: When set to daisy chain mode, what are the IP addresses of my two Ethernet ports?

A: In daisy chain mode, the IP address of the two Ethernet ports are identical and have an address set by a DHCP server, a fallback static address or user defined address.

Q: Can my Ethernet ports be isolated (non-daisy chain mode)?

A: Yes, the Niagara Edge 10 defaults to daisy chain mode, however the Ethernet ports can be configured to be isolated (non-routable), similar to the JACE 8000.

Q: What are the IP addresses of my two Ethernet ports if the Niagara Edge 10 is configured to be isolated (non-daisy chain mode)?

A: If the Niagara Edge 10's Ethernet ports are configured to be isolated, the primary IP address will default to the DHCP or fallback address. The secondary IP address will be defined by the user. The primary IP address may also be defined by the user.

Q. Can I connect the Niagara Edge 10 to my Niagara Supervisor?

A: Yes, the Niagara Edge 10 can be added to a Niagara Supervisor's network and managed just like any other Niagara device. Niagara Edge 10 now counts as 1/10 of a standard Niagara Network connection for a Supervisor at 4.10 and above.

Q. Can I connect the Niagara Edge 10 to my JACE 8000?

A: Yes, the Niagara Edge 10 can be added to a JACE 8000's network and managed just like any other Niagara device.

Q: What agency certifications does the Niagara Edge 10 have?

A: Please see the Niagara Edge 10 data sheet posted in the Resource Library on tridium.com for the most up-to-date information.

Q: What environmental conditions can the Niagara Edge 10 operate in?

A: Operating temperature: -20 to 60 ºC; Storage temperature: -40 to 85 ºC; Humidity: 5% to 95% - non condensing; Shipping and vibration: ASTM D4169, Assurance Level II

Q: When does the warranty start on the Niagara Edge 10?

A: The hardware warranty starts when purchased from Tridium and is valid for 18 months.

Q: If the hardware fails, what is the warranty process?

A: Please contact your distributor for details.