

niagara edge 10

PRODUCT DEFINITION

Tridium's Niagara Edge 10 is an IP-based field equipment controller powered by the Niagara Framework®. Niagara Edge 10 controllers drive applications such as zone temperature control, and the operation of fan coil units, single-stage air handling units, water-source heat pumps and more. Niagara Edge 10 controllers run the full Niagara stack, with 10 points of on-board IO and IO-R-34 expansion capability. Niagara Edge 10 licensing supports three devices and 50 total points to harness the full power of Niagara at the edge.



ACE DETERMINISTIC ENGINE

- Utilize Wire Sheet to create deterministic applications that enable fast startup to control time and deterministic timing when servicing the IO.

NETWORK

- Edge 10 controllers can be daisy chained to continue network connectivity and eliminate the need for separate wiring back to a switch
- Connect Niagara Edge 10 controllers to your main building or IT network and manage them directly with a Supervisor alongside of a JACE®
- Use the secondary Ethernet port of the JACE 8000 to create a private network of Niagara Edge 10 controllers

SPECIFICATIONS

Niagara 4 - Requires Niagara 4.7 or later

HARDWARE

NXP iMX6 SoloX2: 800 MHz ARM Cortex-A9/M4

512 MB DDR SDRAM

2GB total eMMC flash storage with user space set at 1GB

Powered from 24VAC/DC source

5 Universal inputs: Type 3 (10K) thermistors, 0-100K ohm, 0-10VDC, 0-20mA with external resistor, Dry Contact

2 Analog outputs: 0-10VDC, 4mA max output current

3 Digital outputs: Triac, 24VAC @.5 amp

2 10/100MB Ethernet ports capable of daisy chaining

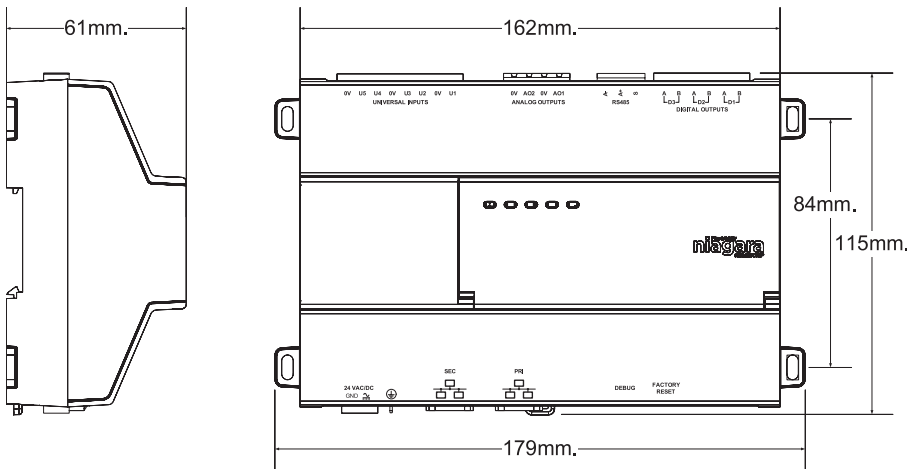
1 RS-485 serial port

Real-time clock

Secure boot

MOUNTING

Support mounting on EN50022 standard 7.5mm x 35mm DIN rail or panel mounting



AGENCY CERTIFICATIONS

- FCC Part 15, class b
- C-UL
- CE
- UL916, Open Energy Management Class 2
- RoHS2
- REACH
- WEEE
- CAN/CSA-C22.2 No. 205-12

EXPANDABILITY

Two (2) IO-R-34 modules connected over a shielded 485 bus

CONNECTIVITY

When data from external sources — i.e. thermostats, variable speed drives, or smart sensors — is required to drive an application, the Niagara Edge 10 allows for connections to those types of external sources using BACnet/IP, Modbus, and SNMP over an IP network and/or BACnet and Modbus over a 485 network.

ENVIRONMENTAL SPECIFICATIONS

- **Operating temperature:** -20 to 60°C
- **Storage temperature:** -40 to 85°C
- **Humidity:** 5-95% non-condensing
- **Shipping & vibration:** ASTM D4169, Assurance Level II
- **MTBF:** 10 years

ORDERING INFORMATION

| Part number | Description |
|-------------|--|
| EDGE-10 | Niagara Edge 10 field controller with 10 points of onboard IO, 1 RS-485 serial port, and 2 10/100 Ethernet ports. Supports two (2) IO-R-34 modules. Includes Niagara N4 and drivers for BACnet, Modbus and SNMP. Supports up to 3 devices or 50 points. Includes all software updates released for commercial use by Tridium for the life of N4, but not for any later versions. |

The Niagara Edge 10 controller is available through a wide variety of original equipment manufacturers. Our open distribution business model and open protocol support allow a vendor-neutral application compatible with devices and systems throughout the world.



tridium.com

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