vykon edge controller 10

PRODUCT DEFINITION

VYKON Edge Controller 10 is an IP-based field equipment controller powered by the Niagara Framework®. VYKON Edge Controller 10s 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. VYKON Edge Controller 10s run the full Niagara stack, with 10 points of on-board IO and IO-R expansion capability. VYKON Edge Controller 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

• VYKON Edge Controller 10s can be daisy chained to continue network connectivity and eliminate the need for separate wiring back to a switch

• Connect VYKON Edge Controller 10s 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 VYKON Edge Controller 10s

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

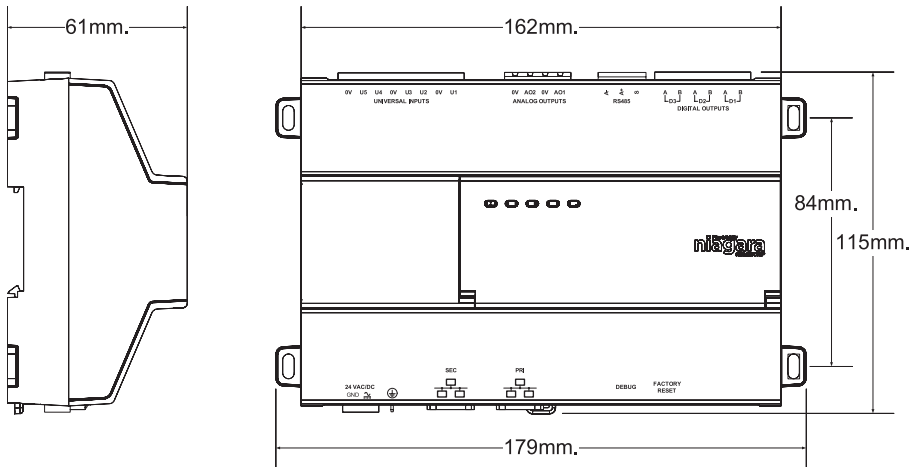2 10/100MB Ethernet ports capable of daisy chaining

1 RS-485 serial port

Real-time clock

Secure boot

powered by

niagara framework®

MOUNTING

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

61mm.
162mm.
84mm.
115mm.
179mm.

EXPANDABILITY

Two (2) IO-R-34 or four (4) IO-R-16 connected over a shielded 485 bus. IO-R-16 expansion requires a separate power supply for each IOR-16 module.

CONNECTIVITY

When data from external sources — i.e. thermostats, variable speed drives, or smart sensors — is required to drive an application, the VYKON Edge Controller 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.

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

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
VEC-10	Vykon Edge Controller field controller with 10 points of onboard IO, 1 RS-485 serial port, and 2 10/100 Ethernet ports. Supports expansion with up to four (4) IO-R processors. 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.

To learn more about how to purchase, install and start using the VYKON Edge Controller 10, contact your VYKON partner. The global community of certified Niagara professionals can serve your unique business needs across any industry or geographic region.

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