JENEsys Edge® VAV

DATA SHEET



JENEsys Edge VAV

Features

- Uses standard Niagara 4 drivers
- Perpetual maintenance included
- IP networking for Niagara FOX communications
- Up to 25 controllers supported on a single Spanning Tree IP Protocol Network
- Capable of stand-alone operation
- Web browser HMI included
- Field configurable using a Web Browser or ProBuilder/Workbench
- Includes pressure independent and pressure dependent applications
- Includes standard VAV sequences
- ASHRAE® G36 Standard Sequence is available on demand
- **N4 license with 14 points, supporting 1 device. One license point is dedicated to the onboard Differential Pressure Input, leaving 13 available license points to distribute across:**
  - 4 Digital Outputs
  - 4 Analog Outputs
  - 6 Universal Inputs
- Ready-to-Use sequences of operation
- Spanning Tree Protocol (STP) communication
- Enhanced high-definition graphics
- Available ancillary parts from Lynxspring include wall sensors, actuators, relays, sensors, and more

Lynxspring's JENEsys Edge VAV

The JENEsys Edge VAV is the industry's first IP-based, variable air volume controller developed utilizing Niagara Framework®.

This unique VAV controller enables utilization of Niagara 4 ProBuilder/Workbench software, Niagara programming tools, and the FOX Protocol for easy setup, programming, commissioning, and control.

The JENEsys Edge VAV has been strategically designed to provide a dynamic solution that:

- reduces deployment time
- lowers installation costs
- is simple to manage
- easy to update

The JENEsys Edge VAV comes fully loaded with required tools for installers, technicians, and service maintenance personnel including balancing, continuous commissioning, single-point configuration, addressing, and user interfaces.

Designed to provide maximum performance at minimum cost, the unit is completely extendable and can be configured to add additional IOs to any JENEsys Edge Controller maximizing the available licensed points.

Use Cases

- VAV Terminal Unit – Cooling Only
- VAV Terminal Unit with Reheat
- Variable & Constant Volume Fan:
  - Parallel Fan-Powered Terminal Unit
  - Series Fan-Powered Terminal Unit
- Dual-Duct VAV Terminal Unit
  - Requires 2 VAV controllers
  - Snap-Acting Control
- Ventilation Only
- California Title 24 compliance
- Options: CO2, Occupancy, Programmable Outputs, etc.

Note: These applications will only work with Lynxspring brand controllers

Ordering Information

Part Number	Description
JENE-EGVAV	Packaging will include one (1) JENEsys Edge VAV controller

Device does not support Power-Over-Ethernet (POE) networks

Specifications

Hardware/Software

Operating System	Helixx Framework by Lynxspring and Niagara Framework(N4)
Processor	1 GHz AM335x ARM Cortex A8
Memory	512 MB DDR3L 800 MHz, 4 GB 8-bit Embedded MMC on-board Flash
Real-Time Clock (RTC)	Battery-powered clock to store setup values (Y:M:D:H:M:S)

Communication Ports

2 Ethernet Ports	10/100 Mbps (RJ-45 Connector) bridged for Spanning Tree Protocol
2 RS-485 Ports	RS-485 serial port with 3-screw connector
Mini-B USB	USB Client Connector utilizes 5-pin Mini-B USB cable
Micro USB	Serial shell access
Onyxx Network	3-wire (LxH LxL SHLD) high-speed differential serial signal

Inputs & Outputs

6 Universal Inputs	Type-3 10 K ohm thermistors; resistance 0-100 K ohms; 0-10 Vdc; 0- 20 mA using a 499-ohm resistor; pulse input: up to 500 Hz; 12bit A/D resolution
4 Digital Outputs	Form A contacts, 24 V at 0.5 A
4 Analog Outputs	0-10 Vdc
Connector Screw Size	3/32" slotted
Supported Wire Size	16-28 AWG
Pressure Transducer	0-2 inch wc, 14-bit accuracy, 10 psi burst, 1% total error band over the temperature compensated range
Housing	UL94V-0

Power

Power Input	External 24 Vac/dc +10%/-10%, 50/60 Hz, 20 VA per VAV with peripherals (Maximum 5 devices including peripherals per 100VA Class 2 Transformer)

Chassis

Construction	**Base:** Plastic, DIN rail or screw mount **Cover:** Plastic
Cooling	Internal air convection
Dimensions	3.46" (8.79 cm) width x 4.25" (10.8 cm) length X 2.125" (6.68 cm) depth
Mounting	Flat panel and 35 mm DIN rail mounting options standard

Environment

Operating Temperature	0 – 60 °C (32 –140 °F)
Storage Temperature	0 – 70 °C (32 –158 °F)
Relative Humidity Range	5 – 95% RH, non-condensing

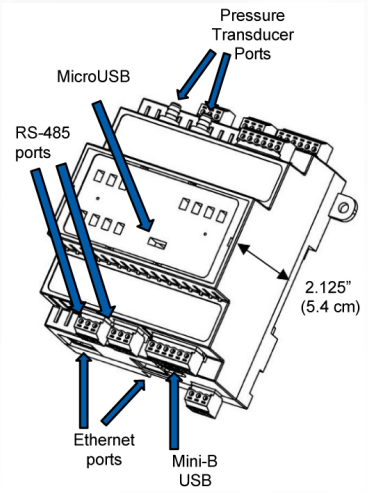
Weight

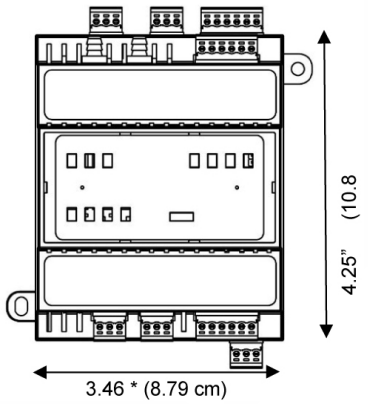
JENE-EG414-VAV	0.6 lbs **Product and Packaging:** 0.8 lbs

Certifications

Compliance

UL916:2015 (5th Edition) CSA C22.2 No. 205-17 (3rd Edition) CE Emissions: FCC 47 CFR Part 15B, ICES-003, EN 5032:2015/AMD:2019 (CISPR 32), AS/NZS CISPR 32:2015, EN 61000-6-3:2007/A1:2011 Immunity: EN 61000-6-1:2007 EMC and CISPR 35:2016





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