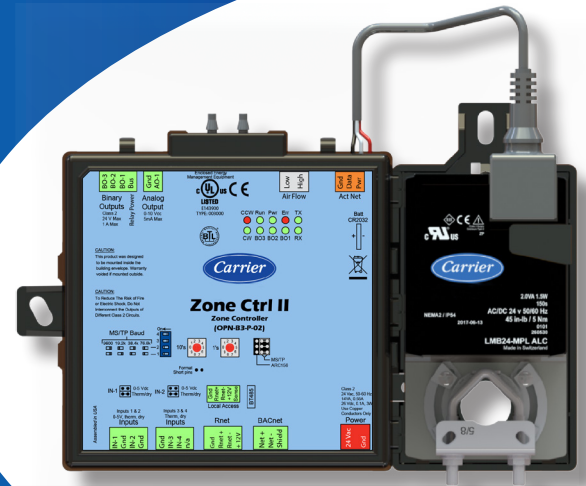




i-Vu® Building Automation System Zone Ctrl II

Part Number: OPN-B3-P-02



The Zone Controller II provides zone level control for a variety of pressure-independent VAV and pressure dependent VVT applications. This completely programmable advanced controller features a separable actuator for easy installation onto fan-powered or single-duct air terminals. It also features native BACnet communications and plug-and-play connectivity to the Carrier i-Vu Building Automation System.



Application Features

- A library of sophisticated factory-engineered and tested control programs provide reliability and energy efficiency
- Programmable zone level control of terminal units, fan coils, lighting, exhaust fans and more
- Supports advanced control routines for zone level humidity control or zone level demand control ventilation (ASHRAE® 62)
- Supports Carrier communicating space sensors and touch screens which allow for local setpoint adjustment and local overrides
- Quick and easy test & balancing process

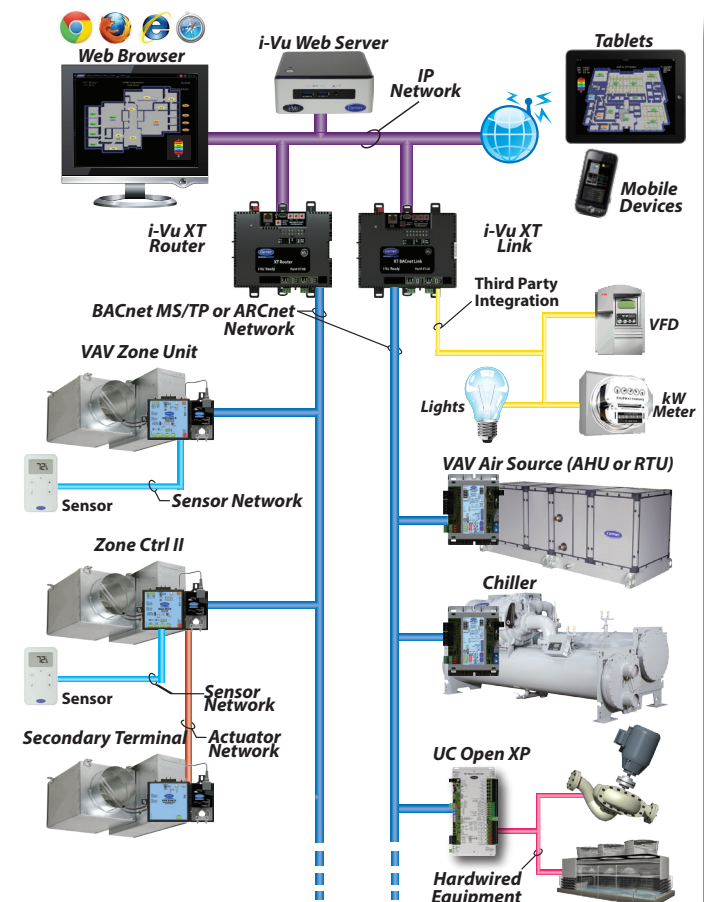
Hardware Features

- Separable brushless actuator for reliability and longevity
- Capable of system or stand-alone operation
- Native BACnet MS/TP or ARCNET communications
- Controls up to 8 points (3 binary outputs, 4 universal inputs and 1 analog output)

System Benefits

- Integrated Carrier airside linkage algorithm for plug-and-play integration with Carrier air sources
- Fully plug-and-play with the Carrier i-Vu Building Automation System
- Supports demand limiting for maximum energy savings
- Supports dual duct applications when used with Carrier's VAV Zone II Secondary Terminal Controller

The i-Vu Building Automation System



i-Vu® Building Automation System

Zone Ctrl II

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Specifications

BACnet Support	Advanced Application Controller (B-AAC), as defined in BACnet 135-2012 Annex L Protocol rev. 9
Communication Ports	BACnet port: EIA-485 port for BACnet MS/TP communications (9600 bps, 19.2 kbps, 38.4 kbps, & 76.8 kbps) or ARCNET 156 kbps; Local Access port: For system start-up and troubleshooting (115.2 kbps); Rnet port: For connecting Carrier communicating room sensors and Carrier's touchscreen user interface ACT net port: For connecting the actuator cable
Inputs	4 inputs Configurable for thermistor or dry contact. Inputs 1 and 2 are also configurable for 0–5 Vdc 10 bit A/D resolution. Binary input pulse frequency 10 pulses per second. Minimum pulse width (on or off time) required for each pulse is 50 msec
Outputs	3 binary outputs: Relay contacts rated at 1A max @ 24VAC/VDC, configured normally open. 1 analog output: 0 to 10VDC (5mA maximum) with 8 bit D/A resolution using filtered PWM.
Protection	Power and network connections protected by non-replaceable internal solid state resettable polyswitches. Power, network and I/O connections also protected against voltage transient and surge events lasting no more than 10 msec.
Separable Actuator	Brushless DC motor, torque 45 inch-pounds (5Nm), runtime 154 seconds for 90 degree travel
Integral Pressure Sensor	Precision low flow AWM series 0–2 in. H ₂ O, sensitive down to ±0.001 in. H ₂ O. Barbed tapered airflow connections accept 3/16 in. (4.75 mm) I.D. tubing. Allows for readings across the 0–2 in. H ₂ O range, accurate to ±5% of full flow at 2 in. H ₂ O
Battery	10-year Lithium CR2032 battery; min of 10,000 hours of trend data retention during power outages
Status Indicators	LED status indicators for BACnet communication, run status, error, power, and all digital outputs
Controller Addressing	Rotary DIP switches set BACnet MS/TP or ARCNET address
Listed by	United States: FCC compliant to Title CFR47, Part 15, Subpart B, Class A; UL Listed, File E143900; CCN PAZX, UL 916, Energy Management Equipment; ANZ: RCM Mark AS/NZS 61000-6-3; Canada: UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant ICES-003, Class A; CE Mark Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; UKCA Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012
Environmental Operating Range	Operating: 32 to 130°F (0 to 54°C) 10 to 90% RH, non-condensing Storage: -24 to 140°F (-30 to 60°C) 0 to 90% RH, non-condensing
Power Requirements	24VAC ± 10%, 50-60Hz, 14 VA power consumption 26VDC (25V min, 30V max), Single Class 2 source only, 100 VA or less

Dimensions

Overall

A: 5.10 in. (12.95 cm)

B: 8.93 in. (22.68 cm)

C: 5.87 in. (14.90 cm)

Depth: 2.5 in. (6.4 cm)

Weight: 1.8 lbs (0.82 kg)

Mounting

D: 7 in. (17.78 cm)

E: 4.89 in. (12.42 cm)

F: 1.04 in. (2.64 cm)

G: 1.46 in. (3.71 cm)

H: 2.55 in. (6.48 cm)

I: 0.58 in. (1.47 cm)

Minimum Shaft Diameter: 3/8 in. (.95 cm)

Maximum Shaft Diameter: 1/2 in. (1.27 cm)

Minimum Shaft Length: 1 3/4 in. (4.45 cm)

