ZN551 Zone Controller

Zone Controller





The ZN551 is a fully programmable, native BACnet Advanced Application Controller (AAC) designed for controlling a single zone in a building. The ZN551 is well suited for VAV, heat pump, unit ventilator and other packaged HVAC applications. It communicates on an EIA-485 LAN using BACnet MS/TP or BACnet over ARCNET communications and connects seamlessly to the WebCTRL® building automation system.

Key Features and Benefits

Application Features

- Versatile controller suitable for a variety of applications, including fan coil units, lighting, and exhaust fan control
- Standard library of control programs available for most zoning applications
- Supports EIKON® graphical programming software, an objectoriented tool that provides complete flexibility for any custom control sequence that you need
- Supports Automated Logic® communicating sensors, which are available in a variety of zone sensing combinations and support setpoint adjustment and occupancy overrides
- Supports Automated Logic touchscreen interfaces for managing and troubleshooting the connected equipment easily
- Supports live, visual displays of control logic, which uses real time operational data and aids in optimizing and troubleshooting system operations
- Quick & easy test and balancing process

Hardware Features

- Controls up to 11 points (5 binary outputs, 5 universal inputs and 1 analog output)
- High-speed, native BACnet over ARC156 communications delivers high speed response when you need it
- Supports native BACnet over MS/TP communications when required
- Fast, powerful, and fully distributed control allows complete independence from any other devices in the system
- Firmware upgrades can be performed remotely
- Easy startup and commissioning using the WebCTRL system user interfaces
- Battery-backed real time-clock keeps time in the event of power failure or network interruption

System Benefits

- Connects seamlessly to the WebCTRL building automation system
- Supports demand limiting and optimal start for maximum energy savings



The WebCTRL® building automation system gives you the ability to understand your building operations and analyze the results. The WebCTRL system integrates environmental, energy, security and safety systems into one powerful management tool that allows you to reduce energy consumption, increase occupant comfort, and achieve sustainable building operations. Our web-based platform allows building managers to control and access information about their HVAC, lighting, central plant and critical processes on premises or remotely at any time of day.



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Specifications

Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device as **BACnet Support:**

defined in BACnet 135-2001 Annex L. Tested to Protocol Revision 9.

Communication Ports: The following ports are available:

EIA-485 port for ARCNET 156 Kbps or MS/TP (9600 bps - 76.8 Kbps)

Local access port for system start-up and troubleshooting

Rnet port for sensors and local operator interfaces

Binary Outputs: Five binary outputs, relay contact rated at 1A max @ 24V-ac, configured normally open.

One analog output, 0-10 V-dc with 8-bit resolution. **Analog Outputs:**

Universal Inputs: Five inputs with 10-bit A/D resolution for dry contact or Type 2 thermistors. Microprocessor: High-speed 16-bit microprocessor with ARCNET communication co-processor

Memory: 512 KByte non-volatile battery-backed RAM, 1 MByte flash memory, 16-bit memory bus

(Shelf life of the battery is 10 years with 10,000 hours of continuous operation.)

Status Indicators: LED status indicators for EIA-485 communication, running, error, power and all binary outputs

Rotary dip switches for intuitive network addressing of modules Module Addressing:

Protection: Built-in surge and transient protection circuitry for power, communications, inputs and outputs

Listed by: UL916 (Canadian Std C22.2 No. 205-M1983), CE, FCC Part 15 - Subpart B - Class A

Environmental -0°F to 130°F (-17.8C to 54.4°C); 10 to 90% relative humidity, non-condensing

Operating Range: NOTE: Control modules must be installed within the building.

Power Requirements: 24 V-ac ± 10%, 26 V-dc (25 V min, 30 V max), 50 to 60Hz, 15 VA.

NOTE: Power consumption will increase when other accessories are attached.

Rugged GE C2950 Cycoloy plastic Physical:

Weight: 0.6 lb. (0.27 kg)

Dimensions: Overall

> Mounting hole spacing 5-5/16".

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Mounting*

Width: 5-1/16" (129mm) Height: 5-11/16" (144mm)

(135mm) spacing (height). Depth: 1-1/2" (38mm) min. panel depth

* For indoor use only

as at left with 5-5/16"

Two mounting holes center line

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