



Applications

- Meets the requirements of local zoning applications, providing control of:
 - Local hydronic reheat valves, with or without sensor changeover.
 - Pressure dependent VAV damper actuators, with options such as local reheat and sensor changeover.
- Improves energy efficiency when used with the optional PIR motion detector cover by automatically adjusting temperature setpoints based on a zone's occupancy mode

Features & Benefits

- 3 configurable inputs for added functionality: 2 digital inputs for remote night setback, occupancy sensing, door contact, remote override, or filter alarm, and 1 input for dry contact or analog sensor changeover
- 1 configurable auxiliary SPST switch for controlling lighting or auxiliary reheat
- 2 outputs for analog (0 – 10V DC) control (EC-STAT-ZA models only)
- 2 outputs for floating and On/Off control (EC-STAT-ZF models only)
- Remote temperature sensing capable of averaging multiple temperature readings
- Compatible with an optional PIR motion detector cover, bringing advanced occupancy functionality and energy savings
- Easy connections for inputs and outputs, with removable terminals
- Backlit LCD display with dedicated function menu keys for simple operation
- Adjustable maximum heating and minimum cooling setpoints, as well as occupancy setpoints
- Lockable keypads for tamper proofing
- Non volatile EEPROM memory prevents loss of parameters during power shortage

Overview

The ECL-STAT-ZN, ECB-STAT-ZN, and ECW-STAT-ZN series represent three thermostat families specifically designed to handle zoning applications. In particular, the ECL-STAT-ZN series uses the LonTalk® communication protocol and is LONMARK® certified. The ECB-STAT-ZN series uses the BACnet® MS/TP communication protocol and is BTL® listed as an Application Specific Controller (B-ASC). Lastly, the ECW-STAT-ZN series communicates over a wireless mesh network.

With three configurable inputs and one configurable auxiliary output, many advanced control functions are possible. In addition, either two analog or two floating control outputs are available, depending on the thermostat model. All thermostats can average temperature readings from remote sensors, as well as provide advanced active occupancy logic through an optional attachable PIR motion detector cover.

All thermostat families can be configured using Distech Controls' EC-Net^{AX}, an open multiprotocol integration solution that is powered by the Niagara^{AX} Framework®. In particular, the ECL-STAT-ZN and ECB-STAT-ZN families can also be configured using the EC-Configure wizard. Furthermore, the ECL-STAT-ZN family can also be configured using the EC-Configure plug-in, another configuration interface that is accessible through any LNS®-based software, such as Distech Controls' Lonwatcher 3.

Product Warranty & Total Quality Commitment

All Distech Controls product lines are built to meet rigorous quality standards and carry a two-year warranty. Distech Controls is an ISO 9001 registered company.

Models Available

| Model | EC(α)-STAT-ZA | EC(α)-STAT-ZF |
|-------------------------------|---------------------------|---------------------------|
| 2 digital inputs | ■ | ■ |
| 1 universal input | ■ | ■ |
| 1 remote sensor input | ■ | ■ |
| 2 analog (0 – 10V DC) outputs | ■ | |
| 2 floating outputs | | ■ |
| 1 digital auxiliary output | ■ | ■ |
| PIR motion detector ready | ■ | ■ |
| Product Number | CDIVI-7200F50(β)1 | CDIVI-7200C50(β)1 |

Recommended Applications

| Model | EC(α)-STAT-ZA | EC(α)-STAT-ZF |
|--------------------------------|------------------------|------------------------|
| 2 & 4 pipe analog | ■ | |
| 2 & 4 pipe floating and On/Off | | ■ |

α represents either L for LONWORKS, B for BACnet, or W for Wireless
 β represents either E for LONWORKS, B for BACnet, or W for Wireless

Thermostat Covers – Optional

Allure PIR Motion Detector Cover



Zx Allure PIR Motion Detector Cover

Allure PIR motion detector cover for all zoning thermostat models

Allure Cover



Zx Allure Cover

Allure cover for all zoning thermostat models

For replacing Traditional covers on thermostats in existing installations in order to have a uniform Allure look across all wall units.

Traditional Cover



Zx Traditional Cover

Traditional cover for all zoning thermostat models

For replacing Allure covers on thermostats that will be used as replacements or additions in existing installations where there is already a uniform Traditional look across all wall units.

Wireless Card (Required for ECW-STAT-ZN Models Only)



ECW-STAT Add-On Card w/Whip Antenna

Add-on card with whip antenna

ECW-STAT Add-On Card w/Remote Antenna

Add-on card with remote antenna

Add-on card needs to be installed in an EC-BOS-2^{AX} or EC-BOS-6^{AX} for communication with wireless thermostat models. JAR file is available free of charge and is included in Distech Controls EC-NET-AX Support Package.

Wireless Repeater



ECW-STAT Repeater

Repeater for communication with out-of-range wireless thermostat models

Wireless Survey Tool



ECW-STAT Survey Tool

Kit for measuring signal strength of wireless transmissions. Used to establish suitable locations for installation of wireless thermostat models

Supported Platforms



EC-Net^{AX}

EC-Net^{AX} is a web-enabled multi-protocol integration solution powered by the Niagara^{AX} Framework, establishing a fully Internet-enabled, distributed architecture for real-time access, automation and control of devices. EC-Net^{AX}'s open framework creates a common development and management environment for integration of LONWORKS[®], BACnet[®], ZigBee[™], and other protocols. Regardless of manufacturer and protocol, the EC-Net^{AX} system provides a unified modeling of diverse systems and data, providing one common platform for development, management and enterprise applications.



LONWORKS Network Services (LNS)

LNS[®] is a client-server platform that allows multiple users, running different LNS-compatible applications, to access a common source for directory, installation, management, monitoring and control services for the network system being managed. Distech Controls' Lonwatcher is an example of a LNS-based network management tool that can use Plug-Ins to configure and monitor controllers and devices in the control system.

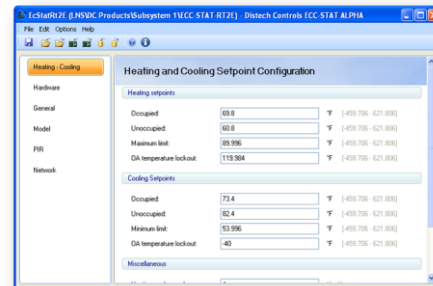
EC-Net^{AX} Wizards and LNS Plug-Ins

EC-Configure EC-Net^{AX} Wizards (ECL-STAT-ZN and ECB-STAT-ZN models only)

Designed for use with EC-Net^{AX} (powered by the Niagara^{AX} Framework), the EC-Configure EC-Net^{AX} Wizards can be used to easily configure a device's parameters including inputs, outputs, fan and valve settings, heating and cooling setpoints, amongst others. Moreover, these wizards can be used to enable and configure additional built-in features such as morning warm-up, load shedding, frost protection and slave operation mode.

EC-Configure LNS Plug-in (ECL-STAT-ZN models only)

Similar to an EC-Configure EC-Net^{AX} Wizard, the EC-Configure LNS Plug-in is a user-friendly configuration interface, which is accessible through any LNS[®]-based software, such as Distech Controls' Lonwatcher 3.



Complementary Products

Temperature Sensors



Allure EC-SENSOR
Allure EC-SENSOR-O

Room temperature sensor with communication jack
Room temperature sensor with occupancy override button and communication jack



SS Plate Wall Sensor
Tamper Proof SS Plate Wall Sensor

Room temperature sensor with stainless steel plate cover
Room temperature sensor with stainless steel plate cover and tamper proof screws

For more information on these or other Distech Controls products please refer to our web site at www.distech-controls.com or contact sales@distech-controls.com.

Dimensions



Units Legend: inches

Specifications

Power

| | |
|---------------------|-----------------------------|
| Voltage | 19-30V AC; 50/60Hz; Class 2 |
| Maximum Consumption | 2VA |

Interoperability

| | |
|-------------------------------------|--------------------------------|
| ECL-STAT-ZN series: | |
| Communication | LonTalk protocol |
| Channel | TP/FT-10; 78Kbps |
| LONMARK Interoperability Guidelines | Version 3.4 |
| LONMARK Functional Profile | Space Comfort Controller #8500 |

ECB-STAT-ZN series:

| | |
|----------------|---|
| Communication | BACnet MS/TP |
| BACnet Profile | B-ASC |
| Baud Rate | 9600, 19200, 38400, or 76800 bps |
| Addressing | BACnet MS/TP MAC address; adjustable range from 1 – 127 |

ECW-STAT-ZN series:

| | |
|--|-------------------------------|
| Communication | Wireless |
| Addressing | Adjustable range from 0 – 254 |
| Frequency (depends on channel parameter) | 2.4GHz, 802.15.4 |

Environmental

| | |
|-----------------------|-------------------------------|
| Operating Temperature | 0°C to 50°C; 32°F to 122°F |
| Storage Temperature | -30°C to 50°C; -22°F to 122°F |
| Relative Humidity | 0 to 95% non-condensing |

Enclosure

| | |
|-----------------|--|
| Material | ABS Resin |
| Color | White |
| Dimensions | 4.93" x 3.41" x 1.43" (124mm x 85mm x 36mm) |
| Shipping Weight | 0.75lbs (0.34kg) |

Agency Approvals

| | |
|-------------------------|---|
| UL | UL873 (US) and CSA C22.2 No.24 (Canada) |
| Industry Canada | ICES-003 (Canada) |
| FCC | Compliant to CFR 47, Part 15, Subpart B, Class A (US) |
| C-Tick | AS/NZS CISPR 22 Compliant (Australia/New Zealand) |
| ECW-STAT-ZN Series only | |
| FCC | Compliant to Part 15, Subpart C |

Inputs

| | |
|---------------|---|
| Binary inputs | Dry contact across terminal BI1, BI2, and UI3 to Scom |
|---------------|---|

Outputs

| | |
|----------------------------|-----------------------------------|
| Triac output ¹ | 30V AC, 1A maximum, 3A in-rush |
| Analog output ¹ | 0-10V DC into 2KΩ resistance min. |
| Auxiliary output | Dry contact |

LCD Display

| | |
|--------------|-----------------------------|
| Type | Backlit LCD display |
| Display Area | 2 rows of 8 characters each |

Functionality

| | |
|---|---|
| Temperature Sensor | |
| - Type | Local 10KΩ NTC thermistor |
| - Resolution | ±0.1°C (±0.2°F) |
| - Control Accuracy | ±0.5°C (±0.9°F) @ 21°C (70°F) typ. calibrated |
| Sensor Ranges | |
| - Occ, Stand-by, and Unocc cooling Setpoint | 12.0-37.5°C (54-100°F) |
| - Occ, Stand-by, and Unocc heating Setpoint | 4.5-32.0°C (40-90°F) |
| - Room Air Temperature | -40-50°C (-40-122°F) |
| - Outdoor Air Temperature | -40-50°C (-40-122°F) |
| Proportional Band for Room | Factory set, heating and cooling at 1.8°C (3.2°F) |
| Temperature Control | |
| Memory | EEPROM |

Electromagnetic Compatibility

| | |
|-----|---|
| CE | EMC Directive 89/336/EEC (European Union) |
| FCC | Compliant with Part 15 |

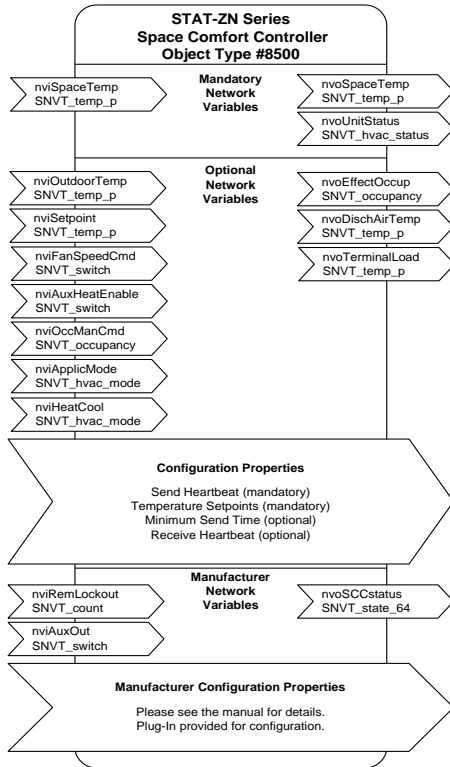
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

Communication Protocols and Standards



1. Specific models only, check table on second page for details.

LONMARK Objects and Network Variables



BACnet Objects and Services

For information on the BACnet objects and services, refer to the BACnet Protocol Implementation Conformance Statement (PICS).

Specifications subject to change without notice.

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Niagara^{AX} Framework is a registered trademark of Tridium, Inc.; ZigBee is a registered trademark of ZigBee Alliance;
All other trademarks are property of their respective owners.



05DI-DSSTATZ-10

STAT-ZN Series

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