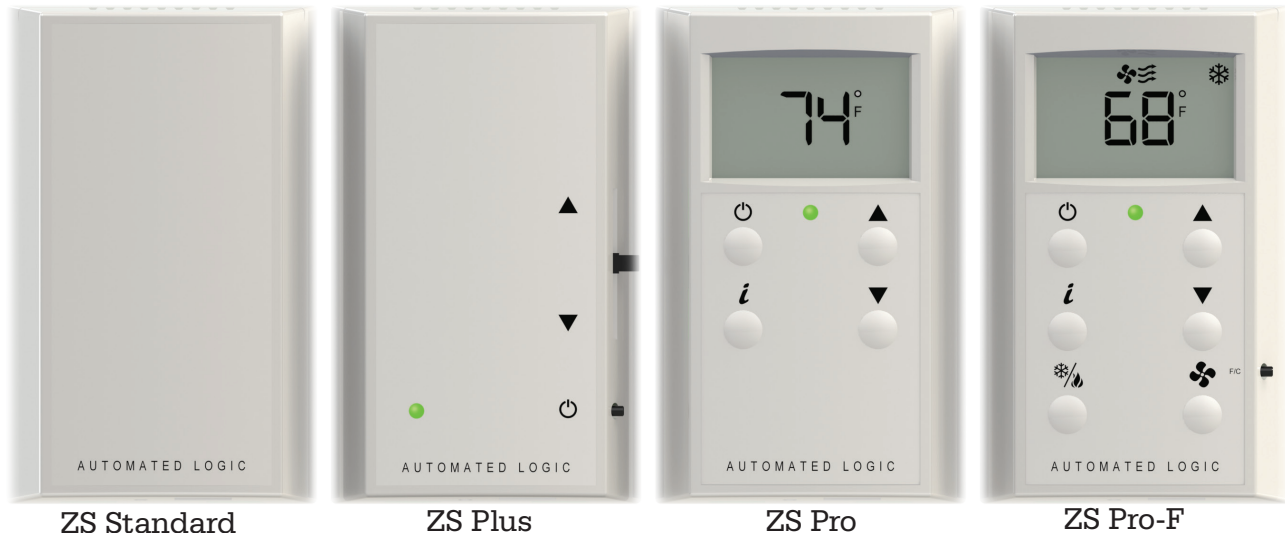


ZS

Intelligent Room Sensors



Automated Logic's line of intelligent zone sensors provides the function and flexibility you need to manage the conditions important to the comfort, productivity, and sustainability of your facility. The ZS sensors are designed to measure room temperature, relative humidity, carbon dioxide and VOC's (Volatile Organic Compounds), and are available in a variety of zone sensing combinations to address your specific control requirements. Designed to work with ZN, SE and ME controllers, the ZS sensor line includes the ZS Standard, ZS Plus, ZS Pro and ZS Pro-F.

Key Features and Benefits

All Room Sensors:

- Provide flexibility for any building sensing application with monitoring of key building conditions, including temperature, humidity, CO₂, and VOC's.
- Attractive, low profile enclosure in neutral color cover complements any room décor.
- Combination sensing within one device efficiently reduces installation costs, wiring and wall clutter.
- Multiple ZS room sensors can be daisy-chained to one controller for temperature averaging or high/low select to achieve optimal control. (Up to 15 ZS sensors per ME controller and five sensors per SE/ZN controller.)
- A hidden communication port allows a laptop computer to be connected to the HVAC control system.
- Mounts on a standard 2" by 4" electrical box for easy installation.
- Smart combinations for measurement of zone temperature and/or relative humidity, CO₂, VOC.
- Multiple models offer a choice of options, including a large easy-to-read display, local setpoint adjustment, local override, and fan control.

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United Technologies

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ZS

Intelligent Room Sensors

ZS Plus:

- Features a convenient local setpoint modification with an easy-to-use slide adjustment.
- Occupancy override is simple using the momentary push button on the ZS Plus. A bright LED provides an immediate indication of status. When the override button is pressed during an unoccupied mode, the zone reverts to an occupied setpoint for a predetermined period of time.



ZS Plus

ZS Pro and ZS Pro-F:

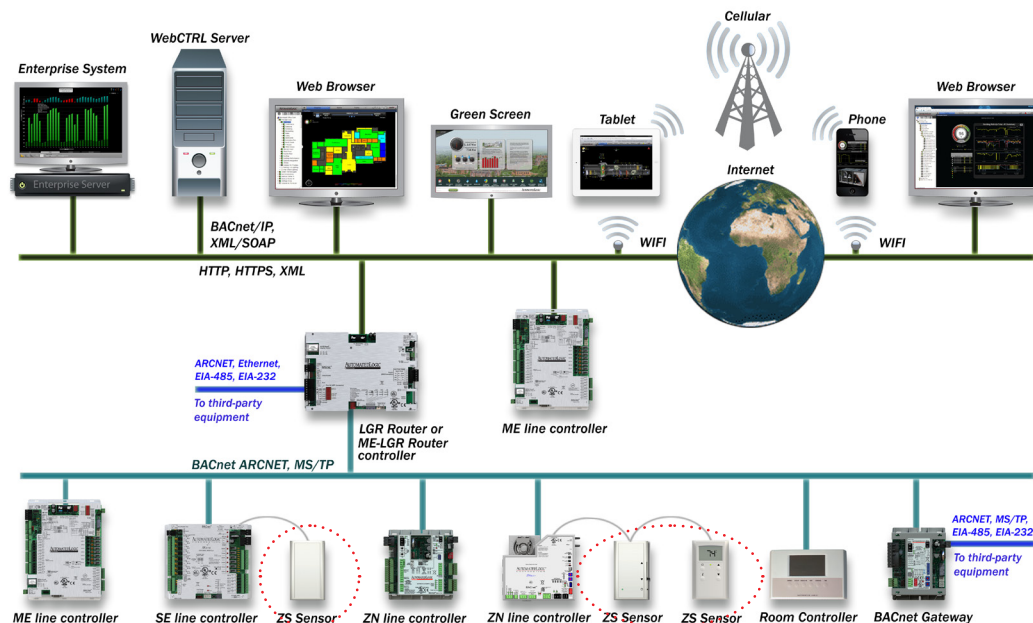
- Large, easy-to-read LCD on the ZS Pro displays zone temperature, outside air temperature, energy-saving mode icon, heating setpoint, and cooling setpoint on all models. Depending on the configuration, it will also display relative humidity, CO₂, VOCs and local override (after-hours occupancy) time.
- Occupancy override is easy using the “Manual On” momentary push button on the ZS Pro. A single push switches the zone to an Occupied mode for a preset period of time. Multiple pushes increase the override time, and the LCD displays precisely how long the zone will stay occupied. The occupied time per push and maximum override time are fully adjustable.
- Zone setpoints can be easily changed on the ZS Pro by pressing the “Warmer” or “Cooler” button. How much each push affects the setpoint and the maximum total adjustments are fully adjustable.
- Pressing the “Fan Speed” button on the ZS Pro-F incrementally adjusts the fan speed of the fan coil unit. The “Mode” button can be used to select among several zone operation modes that are fully adjustable.



ZS Pro



ZS Pro-F



ZS

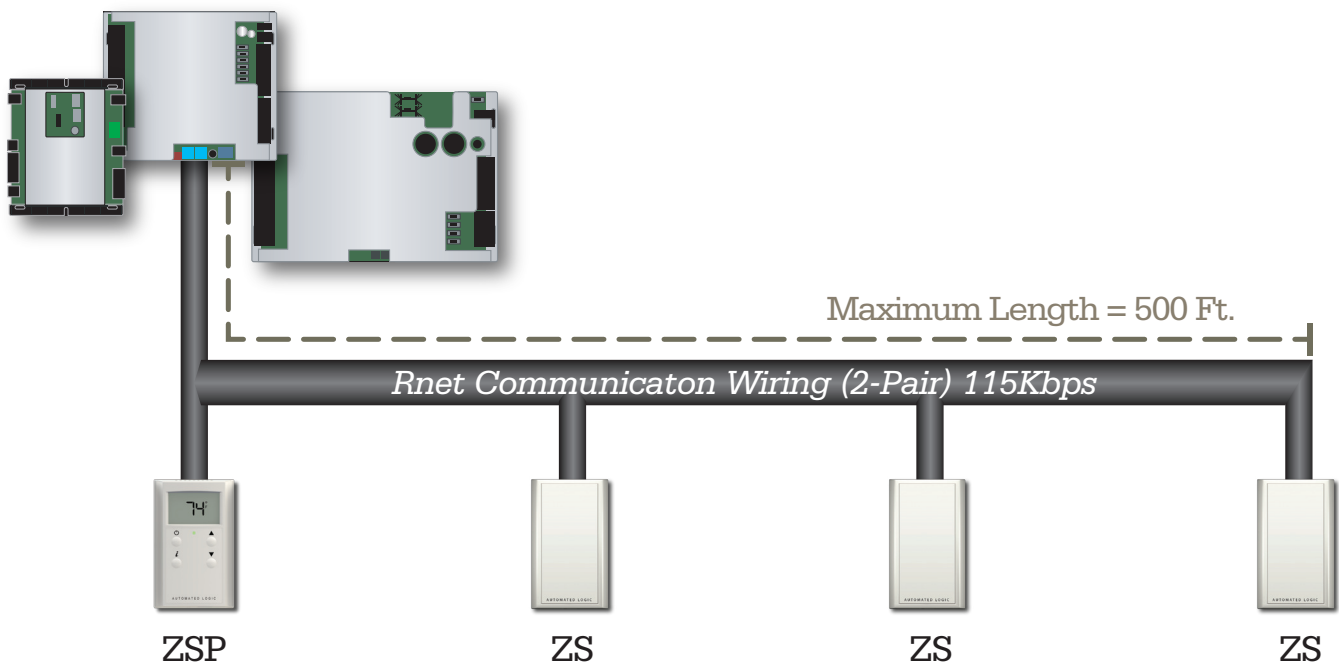
Intelligent Room Sensors



Options*	ZS	ZS Plus	ZS Pro	ZS Pro-F
Standard - no options	ZS-ALC	ZSPL-ALC	ZSP-ALC	ZSPF-ALC
with CO ₂	ZS-C-ALC	ZSPL-C-ALC	ZSP-C-ALC	ZSPF-C-ALC
with Humidity	ZS-H-ALC	ZSPL-H-ALC	ZSP-H-ALC	ZSPF-H-ALC
with VOC	ZS-V-ALC	ZSPL-V-ALC	ZSP-V-ALC	ZSPF-V-ALC
with Humidity, CO ₂	ZS-HC-ALC	ZSPL-HC-ALC	ZSP-HC-ALC	ZSPF-HC-ALC
with Humidity, VOC	ZS-HV-ALC	ZSPL-HV-ALC	ZSP-HV-ALC	ZSPF-HV-ALC

***Note:** To order **without** an Automated Logic logo, use "BNK" in place of "ALC" above.

ZN, SE or ME Controller



Sensing Element Range and Accuracy

Temperature Only	Range:	-4° to 122° F (-20° C to 50° C)
	Accuracy:	±0.35° F (0.2° C)
Temperature if Humidity is Included	Range for Stated Accuracy:	50° F to 104° F (10° C to 40° C)
	Accuracy:	±0.5° F (0.3° C)

Options

Humidity	Range:	10% to 90%
	Accuracy:	±1.8% typical
CO2	Range/Accuracy:	400 to 1250 PPM = ±30PPM or 3% of reading, whichever is greater. 1250 to 2000 PPM = ±5% of reading plus 30 PPM
VOC	Range:	0 to 2,000 PPM
	Accuracy:	±100 PPM

Power Requirements

Temperature Only	ZS Standard or ZS Plus:	12 Vdc @ 6 mA
	ZS Pro or Pro-F:	12 Vdc @ 7 mA
Temperature with Humidity	ZS Standard or ZS Plus:	12 Vdc @ 7 mA
	ZS Pro or Pro-F:	12 Vdc @ 8 mA
Temperature with Humidity and VOC	All Models:	12 Vdc @ 60 mA
Temperature with Humidity and CO2	All Models:	12 Vdc @ 15 mA (idle) to 190 mA (CO2 measurement cycle)

Power Supply

The 4-conductor Rnet cable from a controller supplies +12 Vdc @ 210 mA. Additional power may be needed when applying CO2 and/or VOC sensing.

Communication

115 kbps R-net connection between sensor(s) and controller. Network Capacity: Up to 15 sensors per ME controller and five sensors per SE/ZN controller.

Local Access Port

For local access to start-up and troubleshoot system.

Environmental Operating Range

32° to 122° F (0° - 50° C), 10% to 90% relative humidity, non-condensing.

Color

Pantone® Warm Gray 1C
Specific Pantone codes to achieve this color include:
Pantone Black (0.37)
Pantone Red 032 (0.03)
Pantone Trans.Wt (99.60)

Mounting Dimensions

Standard 4"x 2" electrical box using provided 6/32" x 1/2" mounting screws.

Overall Dimensions

Temperature Sensor or Temperature with Humidity Sensor	Width: 3" (7.62 cm) Height: 4-13/16" (12.22 cm) Depth: 13/16" (2.01 cm)
Sensor with CO2 or VOC	Width: 2-7/8" (7.3 cm) Height: 4-13/16" (12.22 cm) Depth: 1-1/4" (3.18 cm)

