# ZS Duct Sensors
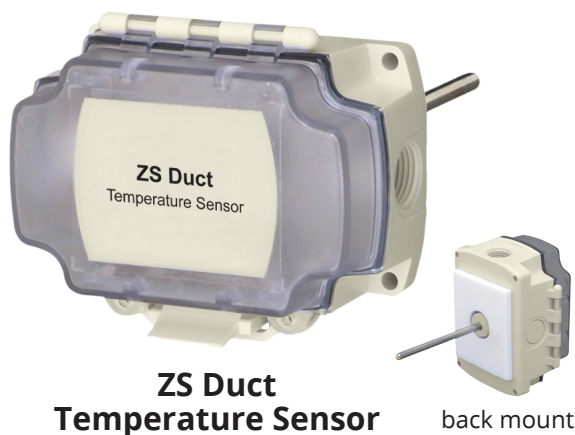
## Communicating Duct Sensors

The Automated Logic® ZS line of communicating duct sensors are designed to measure the air temperature and/or humidity in ductwork. All duct sensors feature closed cell foam to seal the insertion hole and to absorb vibration. Mounting tabs allow for easy installation onto the wall of the duct. The units are built to withstand high humidity and condensation environments.

The ZS duct sensors connect directly to the dedicated sensor network (Rnet) of an Automated Logic controller. This communicating sensor network supports up to 15 ZS sensors through a single port, eliminating the need to consume multiple inputs on the controller.



**ZS Duct Temperature Sensor**

back mount



**ZS Duct Temp + Humidity Sensor**

back mount

**ZS Duct Averaging Sensor**



back mount

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.

We make data **big.**™
Next level building automation engineered to help you make smart decisions.

# ZS Duct Sensors

## Specifications

| Sensing Element | Range | Accuracy |
|---|---|---|
| Temperature (sensing element) | 20° to 120° F (-5° C to 50° C) | ±0.36° F (0.2° C) |
| Temperature (system) | 20° F to 120° F (-5° C to 50° C) | ±0.9° F (0.5° C) |
| Humidity | 10% to 90% | Humidity calibrated at 73° F / 23° C<br>±2.0% typical - Less than 0.5% drift per year |
| **Power Requirements** | 12 Vdc @ 6mA | |
| **Power Supply** | A controller supplies the Rnet sensor network with 12 Vdc @ 210 mA. Additional power may be required for your application. See ZS Sensor Installation Guide | |
| **Communication** | 115 kbps Rnet connection between sensor(s) and controller<br>15 sensors max per Rnet network; 5 sensors max per control program | |
| **Local Access Port** | For connecting a laptop computer to the local equipment for maintenance and commissioning | |
| **Environmental Operating Range** | -40° to 158° F ( -40° to 70° C), 0% to 100% relative humidity, non-condensing | |
| **Enclosure** | **Material**<br>Polycarbonate, UL94V-0 | **Rating**<br>NEMA 4, IP66, UV rated |
| **Probe Dimensions** | **Temperature Only**<br>304 SS<br>0.25" (0.64 cm) Diameter<br>Length specific to part ordered | **Temperature / Humidity**<br>ABS with SS Filter<br>1.0" (2.5 cm) Diameter<br>5.3" (13.5 cm) Length |
| **Mounting** | Duct mount with #8 sheet metal screws | |
| **Listed By** | FCC Part 15-Subpart B-Class B, CE | |

| Part # (Back Mounting) | Part # (Side Mounting) | Description | Sensing | Probe Length |
|---|---|---|---|---|
| ZSD-B-4-6-B | ZSD-S-4-6-B | ZS Duct, Temp Only, 4" probe | Temp | 4" (inches) |
| ZSD-B-8-6-B | ZSD-S-8-6-B | ZS Duct, Temp Only, 8" probe | Temp | 8" (inches) |
| ZSD-BH-6-6-B | ZSD-SH-6-6-B | ZS Duct, Temp + Humidity | Temp/Humidity | 6" standard |
| ZSA-B-8-6-B | ZSA-S-8-6-B | ZS Averaging, 8' probe | Temp | 8' (feet) |
| ZSA-B-12-6-B | ZSA-S-12-6-B | ZS Averaging, 12' probe | Temp | 12' (feet) |
| ZSA-B-24-6-B | ZSA-S-24-6-B | ZS Averaging, 24' probe | Temp | 24' (feet) |

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