ZS IMMERSION SENSORS

Automated Logic

The Automated Logic[®] ZSI line of communicating immersion sensors are designed to monitor water temperature in retrofit or filled pipe applications. The sensor is potted inside a 1/4" stainless steel probe with a thermally conductive compound. All immersion units have etched Teflon[®] lead-wires and double encapsulated sensors to create a watertight package that can withstand a wide range of humidity and condensation.

ZS Immersion

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

BENEFITS

- **Effortless Retrofit:** Easily install and upgrade temperature monitoring without costly plumbing changes.
- **Reliability:** Durable construction with stainless steel probe and double encapsulation for long-lasting performance.
- Efficient Network Integration: Connect up to 15 sensors through a single controller port, minimizing wiring and maximizing efficiency.
- Versatile Applications: Monitor water temperature in chilled water, hot water, and boiler systems for comprehensive building coverage.
- **Reduced Costs:** Reduce installation and operating costs with simplified design and optimized energy consumption.

- Enhanced System Uptime: Dependable performance and minimized maintenance needs ensure continuous, accurate temperature monitoring.
- **Simplified System Design:** Streamlined wiring and reduced controller input usage simplify system design and installation.
- Optimized Building Performance: Precise temperature control capabilities optimize HVAC system efficiency and overall building comfort.



Immersion unit probes are required to be inserted into a thermowell.





The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.

SPECIFICATIONS

Part # (back probe)	Part # (bottom)	Description
ZSI-B-2-6-B	ZSI-S-2-6-B	ZS Immersion Sensor 2" in IP65 enclosure
ZSI-B-4-6-B	ZSI-S-4-6-B	ZS Immersion Sensor 4" in IP65 enclosure
ZSI-B-8-6-B	ZSI-S-8-6-B	ZS Immersion Sensor 8" in IP65 enclosure
ZSI-T-2-WSS-B	ZSI-T-4-WSS-B	Insertion thermowell - two-piece welded 304 stainless
ZSI-T-2-MSS-B	ZSI-T-4-MSS-B	Insertion thermowell - one-piece machined 304 stainless
ZSI-T-2-MB-B	ZSI-T-4-MB-B	Insertion thermowell - one-piece machined brass

Sensing Element	Specifications	
Temperature (system)	Range: -40° F to 212° F (-40° C to 100° C), Accuracy: ±1.3° F (0.72° C)	
Power Requirements	12 Vdc @ 6 mA	
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 15 sensors max per Rnet network; 5 sensors max per control program	
Enclosure	Material: Polycarbonate, UL94V-0, Rating: NEMA, IP66, UV rated	
Probe	304 S/S 0.25" (0.64 cm) diameter Length specific to part ordered	
Mounting	Probes are required to be inserted into a thermowell	
Regulatory	FCC Part 15-Subpart B-Class B, CE	





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1150 Roberts Boulevard, Kennesaw, Georgia 30144 770-429-3000 • Fax 770-429-3001 | automatedlogic.com | A Carrier Company