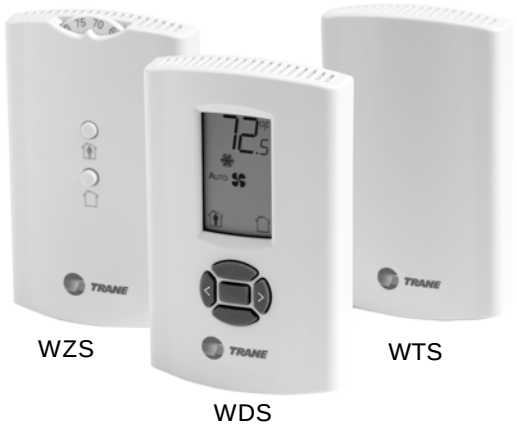

Product Data Sheet

Wireless Zone Sensors

Trane™ wireless sensors are an ideal alternative to wired sensors with the advantage of easy and flexible installation. The wireless feature allows for quick mounting in optimal locations for space comfort while minimizing installation time and relocation expense. The radio is designed specifically for this application and provides excellent signal range, long battery life, and reliable operation.

Trane wireless sensors are compatible with Trane unit controllers, approved for use in most worldwide locations, and are available in three models: universal display (WDS), temperature-only (WTS) and setpoint/occupancy override (WZS).

Features, Benefits, and Part Numbers:

Features		Benefits
All Models	Reduces installation time and expense	Reduces project expense and risk
	Location flexibility	Reduces life cycle costs due to: • The ease of optimal mounting • Improved aesthetics • Comfort for higher productivity and ROI
	Reliable operation	Minimal operation expenses, increased up-time, and increased ROI
WDS	Easy-to-use interface	Clear and simple monitoring and control
	Universal configurations	Can be configured for any Trane system and customer preference
WTS	Simplicity	Eliminates local temperature control when higher control level is required
WZS	Local control	Provides limited occupant temperature control and timed occupancy overrides

Models		Part Number	BAYSENS	Global Parts
Sensors	Universal Display (WDS)	X1379082201		SEN01428
	Temperature-only (WTS)	X13790821		SEN01427
	°F Setpoint/Override (WZS)	X13790492		SEN01364
	°C Setpoint/Override (WZS)	X13790494		SEN01366
Receiver	100 mW (milliwatt) 16 Channel (North America)	X13790854		SEN01544
Sensor/Receiver Sets	Universal Display (WDS)	X1379082401	BAYSENS050A	SEN01430
	Temperature-only (WTS)	X1379082301		SEN01429
	°F Setpoint/Override (WZS)	X13790496		SEN01367
	°C Setpoint/Override (WZS)	X13790498		SEN01368

Specifications and Agency Compliance

Specifications	
Sensor operating temperature	From 32°F to 122°F (0°C to 50°C)
Receiver operating temperature	From -40°F to 158°F (-40°C to 70°C)
Storage temperature	From -40°F to 185°F (-40°C to 85°C)
Storage/operating humidity range	5% to 95% relative humidity (RH), noncondensing
Accuracy	0.5°F over a range of 55°F to 85°F (12.8°C to 29.4°C)
Resolution	±0.125°F over a range of 60°F to 80°F (15.56°C to 26.67°C)/ **±0.25°F outside this range**
Setpoint functional range	45°F to 95°F (7.22°C to 35°C)
Receiver voltage	24V nominal AC/DC ±10%
Receiver power consumption	<1 VA (volt-amps)
Housing material	Polycarbonate/ABS (suitable for plenum mounting), UV protection, UL 94: 5 VA flammability rating
Mounting	3.2 in (83 mm) with two (2) supplied mounting screws
Sensor battery	Two (2) AA Lithium 1.5 V batteries, 2800 mA with an expected life of 5 years under typical conditions
Range[(a)]	• Open range: 2,500 ft (762 mm) with packet error rate = to 2% • Usable: 200 ft (61 mm) • Typical: 75 ft. (25 mm)
Output power	North America: 100 mW (milliwatt)
Radio frequency	2.4 GHz (IEEE Std. 802.15.4-2003 compliant) (2405-2480 MHz, 5 MHz spacing)
Radio channels	16
Address range	000 to 999
Min time between transmissions	30 seconds
Max time between transmissions	15 minutes
Mounting	Fits a standard 2 in. by 4 in. junction box (vertical mount only). Mounting holes are spaced 3.2 in. (83 mm) apart on vertical center line. Includes mounting screws for junction box or wall anchors for sheet-rock walls. Overall dimensions: 2.9 in (74 mm) by 4.7 in. (119 mm)
Agency Compliance	
United States	UL listed: UL94, 5 VA flammability rating and UL916, energy management equipment FCC CFR47, Sec. 15.247 & subpart E, Digital Modulation Transmission with no SAR (FCC ID: TFB-FREESTAR)
Canada	CSA–C22.2 No. 205-M1983 Signal Equipment Industry Canada (Certificate No.: 5969A-FREESTAR)
IEEE/radio frequency range	IEEE 802.15.4-2003, IEEE Std for Info Technology/Telecommunications and information exchange between systems/ Local and metro area networks/Specific requirements, Part 15.4: wireless medium access control (MAC) and physical layer (PHY) specifications for low rate wireless personal area networks (LR-WPANS)

(a) Range values are estimated transmission distances for satisfactory operation of 100 mW (milliwatt) version. Actual distance is job specific and must be determined during site evaluation. Placement of the receiver and the sensor is critical to proper system operation. In most general office space installations, distance is not the limiting factor for proper signal quality. It is affected more by walls, barriers, and general clutter. Note that sheetrock walls and ceiling tiles offer little restriction to the propagation of the radio signal throughout the building as opposed to concrete or metal barriers.

More detailed information, including wiring schematics, are available at http://www.trane.com/WZS

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www.trane.com

For more information, contact your local Trane office or e-mail us at comfort@trane.com