



## MICROSET 4

Alerton's Microset 4 wall sensor offers a sleek, modern look that is a perfect fit in any building. Its strengthened glass touchscreen user interface has the capability to display the setpoint, room, and outside air temperatures. Relative humidity and fan status can also be displayed. A configurable LED Status Light indicator displays heating or cooling status at a glance. The Microset 4 sensor offers several options to meet precise job specifications.

The Microset 4 is fully backward compatible with Alerton's BACtalk™ system, providing users with a tenant control interface, test and balance tool, and field service tool, while enabling them to leverage their existing Alerton devices.

The Microset 4 line of wall sensors includes a model with a carbon dioxide (CO2) sensor as well as one with MS/TP capability.

The flexible Microset 4 displays information and allows occupant control according to the application.

Customizable and intuitive operation enables occupants to turn zone HVAC equipment ON or OFF in 30-minute increments for sporadically occupied areas, such as conference rooms, to set window blinds to open or closed, and offers optional control of lights and fan. This makes saving energy easy and supports green standards of building construction and operation.

With its sleek edge-to-edge hardened glass, capacitive touch backlit display, and polished finish, Alerton's Microset 4 wall sensor offers a full complement of features and looks good on any wall.

## FEATURES AND HIGHLIGHTS

### VERSATILE

- Occupants can view setpoint, room, and outside air temperatures, indoor and outdoor humidity (if enabled in programming), select fan status, and change room temperature setpoints. Data and functions are selectable.

### ENERGY EFFICIENT

- Occupants can select after-hours operation in 30-minute increments or turn zone equipment ON and OFF.

### FLEXIBLE

- Robust and easy-to-use test and balance and field service modes allow maintenance personnel to monitor and adjust parameters.

### ATTRACTIVE

- Modern styling enhances any interior, and functional design makes operation intuitive.

## TECHNICAL DATA

### THERMISTOR

The thermistors are integrated with the device. The thermistors and humidity sensors are processed by an onboard microcontroller.

**TYPE** - NTC.

**RESISTANCE** - 100K Ohm at 77 °F (25 °C).

**STABILITY\*** - Maximum 0.036 °F (0.02 °C) drift per year.

**ACCURACY\*** - ±0.36 °F over range of 32 to 116 °F (0 to 47 °C); ±0.19 °F at 72 °F (22 °C).

*\*Based on normal operating conditions.*

**POWER** - 24 VAC from an energy limited Class 2 transformer.

**POWER CONSUMPTION** - Each Microset 4 requires 3 VA. The sum of all devices should not exceed 85% of the nameplate rating of the transformer.

**PROCESSOR & MEMORY** - ARM Cortex-M4 processor with onboard flash memory.

**DIMENSIONS** - 4.5" H x 3"W x .875" D (114.9mm H x 76.6mm W x 22mm D).

MS4-THC: 4.54" H x 3.04"W x 1.25" D (115.2mm H x 77.2mm W x 31.6mm D).

**ENVIRONMENTAL** - 32 to 140 °F (0 to 60 °C); 0 to 90% RH, non-condensing.

*Specifications subject to change without notice.*

## CO<sub>2</sub> SENSOR

**OPERATING TEMPERATURE RANGE** - 32 to 122 °F (0 to 50 °C).

**POWER CONSUMPTION** - 1.5 mA for measurement every 30s;  
0.74 mA for measurement every 60s; 86 µA for measurement every  
15 min; 52 µA for measurement every 60 min.

**MEASUREMENT RANGE** - 0 to 5000 ppm.

**ACCURACY** -  $\pm 30$  ppm,  $\pm 3\%$  of reading.

## HUMIDITY SENSOR

**OPERATING TEMPERATURE RANGE** - 50 to 113 °F (10 to 45 °C).

**REPEATABILITY** - Minimum  $\pm 0.5\%$  RH.

**ACCURACY** -  $\pm 3\%$  at 10 to 90% RH,  
 $\pm 5\%$  at 0 to 10% and 90% to 100%RH.

**RATINGS** - UL Standard for Safety 916;  
EMC Directive 89/336/EEC (European CE Mark)  
FCC Part 15.107 & 109, Class B, CFR47-15.

**CALIBRATION** - Calibrated at the manufacturer's factory. Using the Automatic Baseline Correction (ABC) algorithm, the Microset 4's CO<sub>2</sub> sensor is self-calibrating and maintenance free, requiring no manual or factory calibration.

## ORDERING INFORMATION

### ITEM NUMBER

MS4-TH	Microset 4 with temperature and humidity sensors
MS4-TH-NL	Microset 4 with temperature and humidity sensors and no logo
MS4-TH-MSTP	MS/TP Microset 4 with temperature and humidity sensors
MS4-THC	Microset 4 with temperature, humidity, and CO <sub>2</sub> sensors

**STYLISH  
TOUCHSCREEN  
WALL SENSOR WITH  
TEMPERATURE AND  
HUMIDITY SENSING.**

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