

## Features and highlights

- Versatile**  
 Occupant can view room and outside air temperatures, select fan speed and change room temperature setpoints. Data and functions are configurable.
- Energy Efficient**  
 Occupants can select after-hours operation in 30-minute increments or turn zone equipment ON and OFF.
- Flexible**  
 A programmable field service mode allows maintenance personnel to monitor and adjust control parameters from the MS/TP Microset II's™ field service mode.
- Points**  
 Points can be used in peer-to-peer applications.
- Interoperable**  
 BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.
- Attractive**  
 Modern styling enhances any interior, and functional design makes operation intuitive.



The Alerton® MS/TP Microset II™ is an intelligent and attractive sensor featuring on-board temperature and humidity sensors that communicates using BACnet® MS/TP. The sensor connects to other BACtalk controllers, and serves as a tenant control interface and field service tool. Sleek styling, a backlit liquid crystal display (LCD) and simple push-button controls make operation intuitive. The LCD simultaneously displays the setpoint, room and outside air temperatures, relative humidity and fan status.

An occupant can use the MS/TP Microset II to view room and outside air temperatures and change setpoints within established limits. The MS/TP Microset II is configurable, allowing site developers the flexibility to display information and allow occupant control according to the varied needs of each application.

Typically, the unit displays room and outside air temperatures. But site developers can program the unit to display additional information: Time-of-day, room relative humidity and outdoor relative humidity, for example. The LCD shows temperatures in Fahrenheit or Celsius.

The MS/TP Microset II's push-button operations can be customized so that an occupant can use them to turn zone HVAC equipment ON or OFF. This is useful for areas that are occupied sporadically, such as conference rooms. Push-buttons also support fan-speed control, and the LCD shows current fan-speed. An occupant can select after-hours operation in 30-minute increments up to established limits.

The MS/TP Microset II communicates with any BACnet controller, which in turn operates the mechanical equipment.

The MS/TP Microset II's programmable field service mode (activated with a special code) enables maintenance personnel to view and adjust control parameters in the field. This reduces maintenance and service time while providing facility personnel with increased flexibility.

## Technical data

- **Thermistor** The thermistor is integrated with the device. The thermistor and humidity sensors are processed by an on-board microcontroller.
- **Type** Uni-curve Type II.  
**Resistance** 10K Ohm at 77 deg. F (25 deg. C).  
**Time Constant\*** 20 minutes (to 63% of new temperature).  
**Stability\*** 0.036 deg. F (0.02 deg. C) drift per year.  
**Initial Accuracy\*** ±0.36 deg. F (1.0 deg. C) at calibration point over range of 32–158 deg. F (0–70 deg. C); recommendation for calibration at site. Offset capability provided.  
*\*Based on normal operating conditions.*
- **Power** 24 VAC at 5 VA. Utilizes a half-wave rectifier. (Orange wire 24VAC/White wire GND.)
- **Processor & Memory** ARM7 processor with on-board flash memory. Flash memory provides nonvolatile program and data storage, and allows for firmware (ROC) updates to the program for future product enhancements.
- **Max. Dimensions** 4.6" (117mm)H X 3.0" (76mm)L X 0.7" (18mm)D.
- **Environmental** Residential, commercial and light-industrial environments. 32–158 deg. F (0–70 deg. C). 0–90% RH, non-condensing.
- **Humidity Sensor**  
 Operating Temperature Range: -40–185 deg. F (-40–85 deg. C).  
 Repeatability: ± 0.5% RH.  
 Accuracy: ± 5% RH 10 to 90% RH, ± 8% RH from 0–10% and 90%–100%RH (typical humidity). Offset capability provided.
- **Communications** BACnet MS/TP LAN up to 76.8 Kbps. Connectivity through (single-pair) pig-tail wires. (Blue wire MS/TP+/Yellow wire MS/TP-).
- **Ratings**  
 EMC Directive (European CE Mark)  
 FCC Part 15.107 & 109, Class B, CFR47-15

## Ordering information

Item number	Description
MS-2100H-MSTP	Microset II wall unit with humidity sensor and MS/TP communications

Specifications subject to change without notice