

## Technical Specifications

## ASP 31-277

Group: **Controls**

Part Number: **ASP 31-277**

Date: **October 2013**

## Daikin Room Temperature Sensor



Model 2508032 Room Temperature Sensor

### Description

Daikin Room Temperature Sensors offer a wide range of features and functionality that work in concert with the MicroTech Integrated System (MIS) to deliver exceptional occupant comfort in even the most demanding application environments. The product family includes plain sensing-only variants, and fully interactive types with a graphical OLED (Organic Light Emitting Diode) display. All room units incorporate precision temperature sensing elements which accurately and reliably measure room temperature. Their compact, low profile design results in an attractive, inconspicuous installation. Strategically placed ventilation slots in the housing optimize airflow through the cover for fast measurement response and superior control. These room sensors are for use with MicroTech Zone Controllers.

The room temperature sensor applications incorporate a digital temperature room unit integrated circuit and plug-in HMI (Human-Machine Interface) port located on the bottom of the cover. The plug-in HMI port provides a convenient means of communicating with the MIS to command or troubleshoot the system. These room units connect to the MicroTech Zone Controller via a six-wire cable terminated with a plug-in RJ-11 connector. The cable transmits the temperature, the communication with the HMI, and the optional setpoint and override signals.

## Available Features

- Organic Light Emitting Diode Display: A 96 × 64 pixel graphical OLED allows simultaneous digital display of room temperature, a user-selected critical point, and day/night operation status.

### Standard Display Features:

- Display of operating mode: Graphic symbols are displayed to indicate the controller's operating mode. A person in the house indicates occupied mode operation and a person outside the house indicates unoccupied mode
- Easy-to-read room temperature value to 1 decimal place
- Digital display

### Configurable Display Features:

- Degrees Fahrenheit or Celsius
- Graphical or alpha numeric setpoint display
- Room temperature display ON or OFF
- Digital setpoint adjustment: The room unit's keypad allows error-free digital setpoint adjustments in one-degree increments. Setpoint values momentarily display as changes are made.
- Override button: The override button allows an occupant to change to an occupied control schedule during the unoccupied cycle for a predetermined time period as defined by the controller. Occupancy graphic is shown on the display during occupied time periods.
- Maintenance-free: These room units draw a small amount of power directly from the controller.
- Compatibility: These room units are compatible with all MicroTech Zone Controllers. The room units are wired with six-conductor phone cables and standard RJ11 connectors.
- HMI port: RJ-11 connection allows laptop connection for commissioning and servicing the controller.

## Specifications

Cover	
Dimensions	4.5" × 2.75" × 1.18" (115 mm × 70 mm × 30 mm)
Color	White
Power Supply	Supplied by TEC or ATEC
Temperature Range	
Setpoint	55°F to 95°F (13°C to 35°C)
Operating	55°F to 95°F (13°C to 35°C)
Output Signals	Proprietary digital protocol Resistive
Sensing Element Type	Digital Temperature Sensor IC 10K Ohm NTC Type 2 thermistor
Accuracy	
Digital Temperature Sensor IC element	32 to 122°F (0 to 50°C) 0.9F (±0.5C)
10K NTC Type 2 thermistor element	55 to 80.6°F (13 to 27°C) ±0.5°F (±0.3°C) 80.6 to 95°F (27 to 35°C) ±1.0°F (±0.55°C)
Calibration Features Temperature	Adjustable to +/- 5°F
Installation	
Wiring	100 ft. Maximum cable length 6C #24 AWG, Belden 1228A or equal, NEC Class 2
Installation Adjustments	None required

## Product Ordering Information

Description	Product Part Number
Room Temperature Sensor, Sensing, Resistive	2508031
Room Temperature Sensor, Sensing, Display, Setpoint, Digital	2508032

## Accessories Ordering Information

Description	Product Part Number
25-foot (7.6 m) cable with connections	2508041
50-foot (15.2 m) cable with connections	2508042
100-foot (30.5 m) cable with connections	2508043