

# Wireless Temperature Sensor with Set Point

MT-17



energy conservation - home and office

## Overview

The MT-17 is a temperature sensor that transmits temperature to a receiving controller. An optional temperature set point adjustment is available to allow user adjustment of the environment. The controller can monitor the temperature with the MT-17 activating heating or cooling equipment as needed.

The MT-17 sensor is a key component in Echoflex's Smart Space solutions that deliver energy savings and quick ROI through distributed controls.

Echoflex products are based on EnOcean wireless technology and include the features of other wireless control technologies like "peel and stick" installation of sensors, simple adaptation to a tenants changing needs, and reduced wiring costs. With EnOcean, the radios require very little power allowing ambient energy sources to power the sensors eliminating the maintenance burden of replacing batteries and disposing of them. The MT-17 absorbs solar energy using photo-cells creating enough power to operate without light for over 24 hours.



## Features

- ⇒ Optional window or door switch
- ⇒ Battery-free wireless temperature sensor and temperature set point adjustment
- ⇒ No mounting hardware → maximum space flexibility
- ⇒ 250m line-of-sight transmission range, interior range typically 30m
- ⇒ operates with no light for 24 hours
- ⇒ up to 30 sensors per controller

## Ordering Information

Model Number	Description	Part #
MT-17	Temperature Sensor, 868MHz	002-5074
MT-17C	Temperature Sensor, 315MHz	002-0074
MT-17S	Temperature & Set point, 868MHz	002-5086
MT-17CS	Temperature & Set point, 315MHz	002-0086
MCT-17	Switch with Temperature, 868MHz	002-5098
MCT-17C	Switch with Temperature, 315MHz	002-0098
MCT-17S	Switch w/ Temp & Set Pt, 868MHz	002-5101
MCT-17CS	Switch w/ Temp & Set Pt., 315MHz	002-0101



## Functional Overview: for models MC-17, MC-17C, MCT-17, MCT-17C

### When used with the following Echoflex controllers:

ER1C-BKC, ERDRC-K	Controller relay activates on mag. switch CLOSED
ERDRC-OM	Controller relay activates on mag. switch OPEN
Heating/Cooling Applications	Switch is used to indicate when a window or door is OPEN triggering un-occupied set points for the HVAC controller
Occupancy Applications	Switch is used in conjunction with an occupancy sensor; switch triggers change of occupancy state, sensor output determines occupancy state

## Technical Overview

Temperature Sensor Range	0 - 40°C ± 0.4°C (32°F - 104°F ± 0.75°F)
Power Generation	Solar cell, minimum level for charge = 40 lux
Full Charge Operating Period	minimum 24 hours
Transmission Period	100 seconds ± 20 seconds minimum
Transmission Range	200m LOS, 30 m office interior
Communications	315 MHz [STM110] or 868 MHz [RCM110] radios
Antenna	Integrated 15cm whip (315 MHz), 9cm (868 MHz)
Input	TEACH button, temperature set point adjustment

## Mechanical Specifications

Operating Temperature	-13 °F to 145 °F (-25 °C to 65 °C)
Relative Humidity	5% to 95% RH (non-condensing)
Dimensions	100mm by 23mm by 23mm (4" x 0.9" x 0.9")
Weight	1.3 oz. (38 gm.)
Mounting	Ceiling mount with screws , Velcro™ or double side tape

## EnOcean Profile

All Versions	DB_0: Bit 3 {0=Teach-In Telegram, 1=Data Telegram}
Dig. Input Profile 30, type 02	DB_0: Bit 0 [0= Contact Closed, 1= Contact Open]
Room operating Profile 10, type 0A	DB_1: Temp. Sensor, 0-40° C (255-0)
Room operating Profile 10, type 0B	DB_2: Temp. Set Point, Min....Max. linear n=0-255

## Echoflex Solutions, Inc.

# 1, 38924 Queens Way, Squamish, BC, Canada V8B 0K8  
 Toll Free: (888) ECH-OFLX (324-6359)  
 Phone: (604) 815-0091  
 Fax: (604) 815-0078  
[www.echoflexsolutions.com](http://www.echoflexsolutions.com)



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