

FEATURES

- **Wireless data transmission**
- **Monitors Room Temperature**
- **Set point adjustment knob**
- **Occupancy Override Button**
- **Photocell powered**

APPLICATIONS

- **Replaces standard thermostats**
- **Temperature monitoring of areas where standard wiring is difficult or impossible**

DESCRIPTION & OPERATION

The Atkinson Electronics ENOC-THERM device is a wall mounted thermostat. It uses an EnOcean transmitter to send data to an EnOcean receiver or gateway. By using a photocell for power, it does not require batteries. In normal office lighting environments, its internal power storage can last indefinitely.

The ENOC-THERM will periodically check for changes in temperature or set-point knob position. The default interval for this is 100 seconds. If a significant enough change has occurred, the device will immediately send an update transmission to the gateway. Otherwise, a redundant transmission will only be sent after a random number of unchanged readings. By default, this random number is in the range from 7 to 14. That is multiplied by the cycle time to set the time delay for the next redundant transmission.

INSTALLATION

The ENOC-THERM can be wall mounted with screws or with surface-safe double-sided tape. If mounting with screws the front cover will need to be removed. To remove the cover, it will be necessary to remove the knob and button first. Once mounted and the cover is replaced the knob and button can be pushed on.

Example transmission times

With the following options set:		Maximum Time between transmissions:	
Cycle time Option	Retransmit Delay	Sensor Changed Update Transmission	Sensor Unchanged Redundant Transmission
100 sec	7 – 14	100 sec	700 – 1400 sec
100 sec	No Delay	100 sec	100 sec
100 sec	Never	100 sec	Never
10 sec	7 – 14	10 sec	70 – 140 sec
10 sec	70 – 140	10 sec	700 - 1400 sec
1 sec	70 - 140	1 sec	70 – 140 sec



SPECIFICATIONS

- SIZE: 2.36 "W x 2.36 "L x 0.79 "H
- MOUNTING: Double Sided Tape or Screws
- POWER: Self-Powered via Photocell
- OUTPUT SIGNALS: EnOcean Protocol A5-10-05

CONFIGURATION OPTIONS

There are 3 factory options for the sensor cycle time and 4 for the redundant transmission delay. Custom options are available but require additional lead-time.

Sensor Reading Cycle Time Options

- 100 seconds (Default)
- 10 seconds
- 1 second

Redundant Retransmit Delay Multiplier

- After 7 – 14 sensor cycles (Default)
- After 70 – 140 sensor cycles.
- No delay, sends on every cycle
- Never send redundant reading

GATEWAY PAIRING

The EnOcean unit transmission ID number can be found on the back of the ENOC-THERM device. This can be used to manually add the unit to a gateway receive list.

A learn button is partially accessible if using a gateway or receiver that learns the transmitter unit via the EnOcean Teach-In telegram. The button can be pressed through the slots on the top of the thermostat case.

DATA TRANSMISSION FORMAT

The ENOC-THERM uses the EnOcean Equipment Profile (EEP) A5-10-05. This profile is for a Room Operating Panel with Temperature sensor, Set Point, and Occupancy Control. The data portion of the transmission is 32-bits. The data is encoded as follows:

Start Bit	Length	Data	Data Range	Scale
0	8	Not Used		
8	8	Set Point – Linear from Min to Max	0 to 255	0 to 255
16	8	Temperature - Linear	255 to 0	0 to 40 °C
24	4	Not used		
28	1	EnOcean Learn bit	0= teach-in telegram, 1=data telegram	
29	2	Not used		
31	1	Occupancy Button State	0 = button released, 1 = button pressed *	

*NOTE: The meaning of the occupancy state bit is inverted from the standard A5-10-05 profile by the ENOC-THERM

Contains FCC ID: SZV-STM332U

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.