

User manual

Activity tracking sensor

Model No: ADS1301

FCC ID: 2AE59ADS1301



1 system introduction

Activity sensors log users daily routine. e.g. Attach a sensor to the refrigerator and other kitchen objects to infer when food is prepared or consumed. OPU receives activity signals from each of the sensors to log more detail.

2 Specification

Sensor Requirement	
Device Type	Activity tracking sensor
Alarm Sensor Type	Movement (front, back, left, right, up and down)
Detection type	A signal will be issued when the sensor detects a movement of the object it attached to.
Communication Requirement	
RF Frequency	433.92MHz
Modulation	ASK
Antenna	Internal Antenna, VSWR<2, Peak Gain -4dBi
System Requirement	
Power	3 volt battery CR2032
Power Consumption	6 month (Triggered 10 times a day)
Standby current	≤40uA
Trigger current	≤30mA
Battery's voltage status	3V (Full power – functional) 2.1~2.35V (Low battery warning) Below 2.1V (shuts down)
Operating Environment	Working Temp: -10°C ~50°C Humidity: 5%~80%RH non-condensing Storage Temp: -20°C ~60°C Humidity: 5%~85%RH
Environmental Standard	RoHS, REACH
Alarm Type	
Heart Beat	Alive signal will be issued once per 12 hours.
Activity Signal	Each movement of the object being monitored will issue an RF signal for this event. (Variance : 1600 for Refrigerator)
Low Battery Alarm	The device will send out a low battery signal, if the voltage drop to low battery state and the signal will be sent accompany heart beat and other alarms.
LED Indicator	* LED color: Red * Normal Operation: LED off

	<ul style="list-style-type: none"> * Power on: Flash Frequency 250 ms on/off , 4 times * HeartBeat&Event Alarm : LED on 460ms , then off * Low Battery (When the battery is lower than 2.4V): Flash Frequency 50 ms on/off, 5 times
Silence Time	When Activity sensor power on within 5 minutes, once Activity sensor alarms it will start to count 5 seconds, if any movement detected in this silence period, the alarm will be not triggered. After the 5 minutes, the silence period is 1 minute.
Activity trigger alarm	Once Activity sensor alarms it will start to count 1 minute, if any movement detected in this period .The alarm will be not triggered.

3 Operating instructions

1. First use the Activity sensor, pull up the insulation spacer.
2. The Activity sensor fixed right where you need to detect, such as the refrigerator door, need to pay attention to the fixed in the near the door, away from the door of the shaft, because it is not easy to detect.
3. When battery low power, if Activity sensor send alarm, the low battery alarm will accompany to sending.
4. If battery low power, please replace the battery as soon as possible.

FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.