

Technical Sheet For Multifunctional sensor

CSMS-04/00.1.0x (4 in 1)

CSMS-05/00.1.0x (5 in 1)

CSMS-06/00.1.0x (6 in 1)

CSMS-09/00.1.0x (9 in 1)

(x=0: White; x=1: Black)



The worldwide STANDARD for home and building control

CHARACTERISTICS

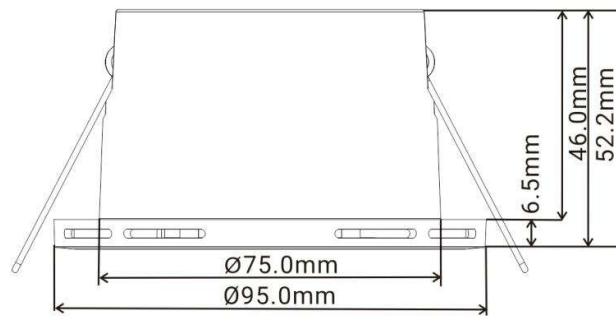
- Detects temperature, humidity, PM2.5, PM10, CO2, TVOC, formaldehyde, movement, Illuminance data and output AQI
- Support sending alarm value, when the temperature, humidity, CO2, PM2.5, PM10, TVOC, formaldehyde, AQI detection data exceeds the threshold, it can send the corresponding alarm telegram
- AQI, CO2, relative humidity, PM2.5, PM10, TVOC, formaldehyde level control
- Support for motion detection, using pyroelectric infrared detection technology, which can only detect normal movement behavior. Can configurable up to 4 presence control outputs and work modes of master/slave
- Built-in brightness sensor, and control the light via brightness threshold and also control logically with movement signal
- Constant lighting control
- RTC functions for heating/cooling system, as well as support additional heating/cooling
- Relative humidity/Ventilation/CO2 control, 3 level humidity/fan speed/CO2
- Logic functions and scene group functions
- Support the KNX Data Secure

Note: Different models of multifunctional sensor can be configured with different types of sensors (temperature, humidity, PM2.5, PM10, CO2, TVOC, formaldehyde, motion, brightness sensors)

PARAMETERS

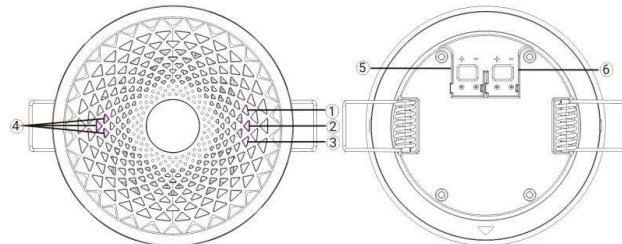
Power supply	Bus voltage	21-30V DC, via the KNX bus
	Bus current	<4mA/24V DC, <4mA/30V DC
	Bus consumption	<100mW
	Voltage	12-30V DC
Auxiliary supply	Current	<17mA/12V DC, <16mA/24V DC <12mA/30V DC
	Consumption	<0.5W
	Connection line	KNX Bus connection terminal(Red/Black) Auxiliary supply Connection terminal(Yellow/White)
Operation and display	Programming button and LED	For assigning the physical address
	Temperature sensor	Range -10°C~ + 45 °C
Humidity sensor	Range	0~100%
PM2.5/PM10 sensor	Range	0-1000µg/m³
	Efficiency	50%(φ=0.3µm), 98%(φ≥0.5 µm)
	Response time	≤ 1s
CO2 sensor	Range	400~2000ppm
TVOC sensor	Range	0~65000ppb
Formaldehyde sensor	Range	0~5 ppm
Brightness sensor	Range	0~10000 Lux
Temperature range	Operation	-5 °C ... + 45 °C
	Storage	-25 °C ... + 55 °C
	Transport	-25 °C ... + 70 °C
Ambient	Humidity	<93%, except dewing
Installation	Ceiling mounted or Surface mounted	
	Surface mounted with additional accessory CSMSA-00/0.1.0x	
	Mounting height 2.5-6m	

DIMENSIONS



Model	Dimension	Weight
CSMS-04/00.1.0x, CSMS-05/00.1.0x	φ95*52.2mm	0.2KG
CSMS-06/00.1.0x, CSMS-09/00.1.0x		

DESCRIPTIONS



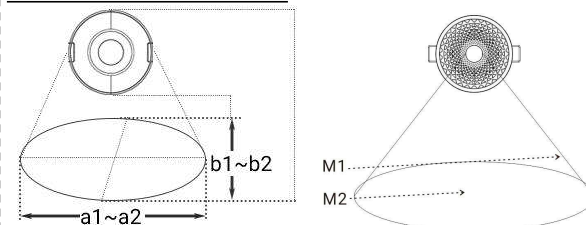
- ① Programming LED ② Programming button ③ Alarm LED ④ Brightness sensor
⑤ KNX bus connection terminal ⑥ Auxiliary supply connection terminal
- Reset the device to the factory configuration: press the programming button and hold for 4 seconds then release, repeat the operation for 4 times, and the interval between each operation is less than 3 seconds**

INSTALLATION INSTRUCTIONS

1. Keep it far away fridge, air conditioning, and stovepipe, where temperature changes violently.
2. In a certain temperature, speed of wind affects a little.
3. If ambient temperature approaches body temperature, the sensor will lose efficacy.
4. Between the sensor and detected area must not have stumbling block.

5. Sensor can not be directly on the windows and doors, and where there is direct sunlight. Air flow and dramatic changes in light will case sensor generates fault alarm.

INSTALLATION DIAGRAM



The following table shows the maximum range of the different areas for different installation heights (H) (unit: meter), with a movement speed of 1.0m/s:

H	M1		M2	
	a1	b1	a2	b2
2.5	5	4	7	6
3	6	5	8	7
4	8	7	11	9.5
5	10	8.5	13.5	11.5
6	11	10	15.5	13.5

a: the wide range of detection diameter;
b: the narrow range of detection diameter;
a, b is corresponds to direction of sensor installation
M1: walking straight to sensor;
M2: walking across sensor.

Note: the data is referred from internal laboratory, there may be differences in results depending on the environment, object and movement speeds. For better detection effect, temperature difference between the ambient and the human body should be greater than 5°C, to avoid abnormal triggering.

IMPORTANT INFORMATION

Installation and commissioning of the device may only be carried out by trained electricians. The relevant standards, directives, regulations and instructions must be observed when planning and implementing the electrical installation.

● Protect the device against moisture, dirt and damage during transport, storage and operation!

● Do not operate the device outside the specified technical data (e.g. temperature range)!

Should the device become soiled, it may be cleaned with a dry cloth. If this does not suffice, a cloth lightly moistened with soap solution may be used. On no account should caustic agents or solvents be used.