# CO<sub>2</sub> Sensor A2-CO2-ZW

CO2 Sensor A2-CO2-ZW is a Z-Wave 800 series based air quality detector mainly used to monitor CO2 concentration, temperature and humidity in indoor environment. Device can be added into any Z-Wave network and is compatible with any other Z-Wave certified devices.

## Specification

- Power Supply: DC/AC12-24V
- · Self Dissipation: <3W
- · CO2 Display Range: 400-5000ppm
- Temperature Range: -10 50° C
- · Humidity Range: 5 95%RH
- Work Environment: -10~50°C 5-95%RH (Non-condensation)
- · Housing: ABS+ PC
- Dimension: 89\* 89\*20.5mm
- · Hole Pitch: 60mm
- · Z-Wave 800 series
- · Z-Wave Frequency: Operating frequency range, defined by the regulatory bodies (for Z-wave in Europe: 868.0 - 868.6 MHz, 869.7 - 870.0
- · Maximum Transmitting Power: +14dBm
- · Installation: Wall-mounted (vertical)





#### Declaration of Conformity

Hereby, we declare that the device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

## · WEEE Directive Compliance



The device marked with this symbol should not be disposed of with household waste. It is the user's responsibility to deliver the used appliance to a designated recycling point.

# · Z-Wave Compliance



The sensor is a fully compatible Z-Wave Plus device.

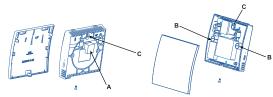
## Important Safety Instruction

- ⚠ Read theinstructions before starting up the unit!
- ⚠ This product is not a toy. Keep out of reach of children and animals!
- ⚠ Do not expose the device to moisture, water or other liquids. Do not place liquids near or on the device!
- ⚠ Do not attempt to disassemble, repair or modify the device
- ⚠ This product is for indoor use only. Do not use outdoors!

## Installation

#### ▶ Location:

Device is suggested to be installed indoor, a place with around 1.5m height above the floor where represents the average concentration of the air. It should be away from direct sunlight, any cover, or any heat source, to avoid false signal for temperature control.

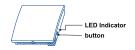


Step 1: Separate the front cover and bottom case by removing the screw at the bottom of device. Connect the power source (position A).

Step 2: Mount the device on the wall with two screws (position B) or hang the device on the wall with one screw (position C).

Step 3: Mount the front cover back by tightening the screw at the bottom of the device and the device is ready for normal work

## Z-Wave Operation



### ▶ State of the LED indicator

When the device is powered on, the LED indicator lights up, short press the button one time to turn off the LED indicator, press again to turn on the LED indicator.

## ► Restore factory setting

Press the button more than 10 times in succession to restore factory setting.

## ► Z-Wave Operation

· Including& Excluding of Z-Wave network

Activate Inclusion/Exclusion mode in the gateway. Short press the button

3 times in succession and the LED indicator will keep flashing and then waiting for the device included or excluded of Z-Wave network (you can see whether the device include/exclude of Z-wave network successfully or not on the gateway)

## · Association Group

Device supports 1 association group:

AG identifier	Max Node ID	Command Classes	Trigger situation	
0x01	1	COMMAND_CLASS_ SENSOR_MULTILEVEL, SENSOR_MULTILEVEL_ REPORT	The change between the current detection value of each sensor and the last reported gateway value is greater than this setting value of configuration parameter No.2-No.6     Configuration parameter of No.10-No.14 to set the definite time of corresponding sensors	
		COMMAND_CLASS_ DEVICE_RESET_ LOCALLY, DEVICE_ RESET_LOCALLY_ NOTIFICATION	Device restores to factory setting	

Information

# Parameter Setting Name

Size

No.

140.	Ivaille	Size	Illioillation	Delault	values
1	Temp. unit	1	0: Celsius 1: Fahrenheit	0	0-1
2	Temp. difference reporting	2	Unit 0.1°C  0: Disabled 3-255: n *0.1°C automatically report the temperature to the gateway when temperature variation greater than this value	5	0, 3-255
			Unit 0.1F  0: Disabled 3-255: n *0.1F automatically report the temperature to the gateway when temperature variation greater than this value	10	0,3-255
3	Humidity difference reporting	1	0: Disabled 1-99: Automatically report the Humidity to the gateway when temperature variation greater than this value	5	0-99
4	CO2 difference reporting	2	0: not report whether the detected value of CO2 change or not 1-5000: unit n*ppm, if the change between the detection value and the last reported gateway value is greater than this value, the current detection value will be actively reported	200	0-5000
10	Auto report Temp. value to gateway regularly	2	0-29: not report 30- 30000: n*second, auto report to current value to gateway every n*1s	300	0-30000

No.	Name	Size	Information	Default	Possible values
11	Auto report humidity value to gateway regularly	2	0-29: not report 30- 30000: n*second, auto report to current value to gateway every n*1s	300	0-30000
12	Auto report CO2 value to gateway regularly	2	0-29: not report 30- 30000: n*second, auto report to current value to gateway every n*1s	300	0-30000
20	Temp. offset	1	unit: °C,accuracy: n*0.1	0	-99~99
			unit: °F,accuracy: n*0.1	0	-99~99
21	Humidity offset	1	Humidity offset value, accuracy: n*1	0	-20~20
22	CO2 offset	2	CO2 offset value, accuracy: n*1	0	-500~500
255	Restore factory setting	1	Restore factory setting	0	0-1

## · Device Property:

Device Type

Sensor - Multilevel

## Identifiers

Possible

Default

GENERIC TYPE SENSOR MULTILEVEL

SPECIFIC\_TYPE\_ROUTING\_MULTILEVEL\_SENSOR

### Role Type

ZWAVEPLUS INFO REPORT ROLE TYPE SLAVE ALWAYS ON

# · Command Class supported by the device:

### Support S2

COMMAND CLASS VERSION,

COMMAND CLASS MANUFACTURER SPECIFIC,

COMMAND CLASS DEVICE RESET LOCALLY,

COMMAND CLASS POWERLEVEL,

COMMAND\_CLASS\_SENSOR\_MULTILEVEL\_V5,

COMMAND CLASS CONFIGURATION.

COMMAND\_CLASS\_ASSOCIATION\_V2,

COMMAND CLASS MULTI CHANNEL ASSOCIATION V2,

COMMAND CLASS ASSOCIATION GRP INFO,

COMMAND CLASS FIRMWARE UPDATE MD V5

## Not support S2

COMMAND\_CLASS\_ZWAVEPLUS\_INFO,

COMMAND\_CLASS\_TRANSPORT\_SERVICE\_V2,

COMMAND CLASS SECURITY 2,

COMMAND CLASS SUPERVISION

## 1-Year Limited Warranty

We warrant this product to be free from defects in material and workmanship under normal and proper use for one year from purchase date of the original purchaser. We will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. This limited warranty does not cover any damage to this product that results from improper installation, accident, abuse, misuse, natural disaster, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, or any unauthorized disassembly, repair or modification. This limited warranty shall not apply if: (i) the product was not used in accordance with any accompanying instructions, or (ii) the product was not used for its intended function. This limited warranty also does not apply to any product on which the original identification information has been altered, obliterated or removed, that has not been handled or packaged correctly, that has been sold as secondhand or that has been resold contrary to Country and other applicable export regulations.