

Applications Guide

Temperature/Humidity Sensor XW-TH-B

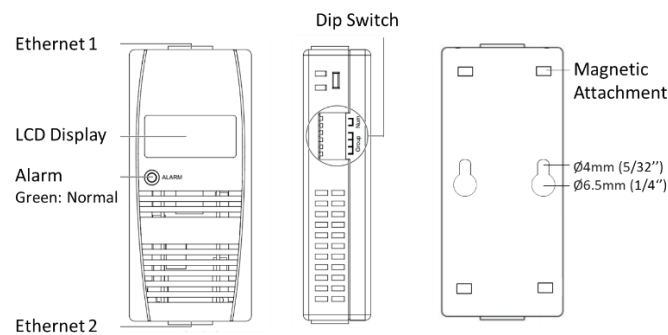
Background:

Temperature/Humidity Combination Sensors model XW-TH-B are optional indoor remote sensors available for the ASMUC Controller [2023 and after] and OP2MUC Controller. Up to 4 Temperature/Humidity sensor can be set up per control zone (up to 16 sensors with 4 control zones) to significantly increase the sensor capacity and flexibility of the controller. Each sensor requires a single ethernet cable which can be further wired in series to simplify field wiring.



Overview:

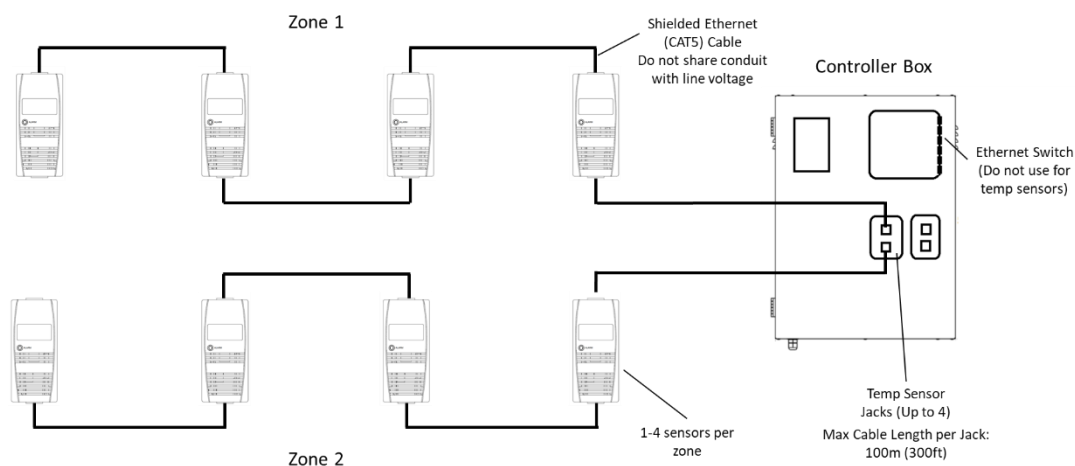
Each sensor comes with 2 interchangeable ethernet ports, LCD screen for local display, and dip switch for sensor address. The sensor is powered through the ethernet cable; external power is not required for the sensor to operate. For mounting, it includes both magnetic and mounting hole pattern.



Specifications:

Model	XW-TH-B
AIRSYS PN (Order By)	8454027600
Designed Usage	Indoor Use Only
Operating Temperature	-10 ~70°C (14~158°F)
Storage Temperature	-30 ~70°C (-22~158°F)
Operating Humidity	0~100%RH Sensor designed for air humidity, not designed to detect liquid water
Temperature Accuracy	+0.5°C @ 25°C
Humidity Accuracy	+3%RH @ 25°C
Power Usage	<1W (power supplied from indoor controller)
Dimensions	97x44x22mm (3.8x1.7x0.9in)
Weight	61g (2oz)

Application Wiring Diagram



Sensor Addressing

Configure each sensor according to the control zone as needed using the dip switches on each sensor. This is critical for the controller to correctly identify the sensor and perform its control sequence of operation. Only configure as needed. For example, if there are 1 sensors each in zone 1 and zone 2, configure zone 1 sensor 1 and zone 2 sensor 1.



Address 11

OFF, ON, OFF, ON, OFF, OFF

Zone	Sensor	Address	Dip 1	Dip 2	Dip 3	Dip 4	Dip 5	Dip 6
1	1	11	OFF	ON	OFF	ON	OFF	OFF
	2	12	ON	ON	OFF	ON	OFF	OFF
	3	13	OFF	OFF	ON	ON	OFF	OFF
	4	14	ON	OFF	ON	ON	OFF	OFF
2	1	15	OFF	ON	ON	ON	OFF	OFF
	2	16	ON	ON	ON	ON	OFF	OFF
	3	17	OFF	OFF	OFF	OFF	ON	OFF
	4	18	ON	OFF	OFF	OFF	ON	OFF
3	1	19	OFF	ON	OFF	OFF	ON	OFF
	2	20	ON	ON	OFF	OFF	ON	OFF
	3	21	OFF	OFF	ON	OFF	ON	OFF
	4	22	ON	OFF	ON	OFF	ON	OFF
4	1	23	OFF	ON	ON	OFF	ON	OFF
	2	24	ON	ON	ON	OFF	ON	OFF
	3	25	OFF	OFF	OFF	ON	ON	OFF
	4	26	ON	OFF	OFF	ON	ON	OFF

Verification: After configuration, use the LCD screen to verify the correct address has been set. The lower left display should match the "Address" column in the table above.

