Indoor Ambience Monitoring Sensor AM100 Series (AM102 & AM102L)



AM102(L) is a compact indoor ambience monitoring sensor for measurement of temperature and humidity. These data will be shown on the E-ink screen in real-time, which allow to quantify the indoor environment and comfort. AM102(L) is widely used for office, store, classroom, hospital, etc.

Apart from screen display, sensor data can also be transmitted using LoRaWAN®. With this low-power technology, AM102(L) can work for more than 7 years with 2 replaceable batteries. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually.

◆ Features

- Uses Sensirion high-precision sensor, capable of sensing subtle changes in temperature and humidity
- Visual data to understand the environment easily via E-ink screen
- Smart hibernate mode schedulely to save battery power
- More than 7 years work without replacing batteries
- Store locally 1280 historical records and support retransmission to prevent data loss
- Built-in NFC for easy configuration
- Compliant with standard LoRaWAN® gateways and network servers

➢ Quick and easy management with Milesight IoT Cloud solution

◆ Specifications

Wireless Transmission	
Technology	LoRaWAN®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A
Sensors	
Temperature	
Operating Principle	Digital CMOSens® technology (MEMS)
Range	-20°C ~ 60°C
Accuracy[1]	± 0.2°C
Resolution	0.1°C
Humidity	
Operating Principle	Digital CMOSens® technology (MEMS)
Range	0% RH~ 100% RH
Accuracy	± 2% RH
Resolution	0.5% RH
Display & Configuration	
Display	AM102: 2.13-inch Black & White E-Ink Screen AM102L: Not Support
Button	1 × Power Button
LED	1 × Status Indicator
Configuration	Mobile App via NFC
Physical Characteristics	
Power Supply	2 × 2700 mAh ER14505 Li-SOCl$_2$ Replaceable Batteries
Battery Life* (10 min interval, 25°C)	AM102: Over 7 Years AM102L: Over 9 Years
Operating Temperature	-20°C ~ 60°C (E-Ink Screen: 0°C ~ 40°C)
Relative Humidity	0% ~ 95% (non-condensing)
Ingress Protection	IP30
Dimension	68 × 65 × 20.5 mm (2.68 × 2.56 × 0.81 in)

Installation	Wall Screw Mounting, 3M Tape Mounting

*The battery life is tested under laboratory conditions and for guideline purposes only.

◆ Dimensions(mm)

