

AM107

Indoor Air Quality Monitoring Sensor



powered by  Milesight



◆ Introduction

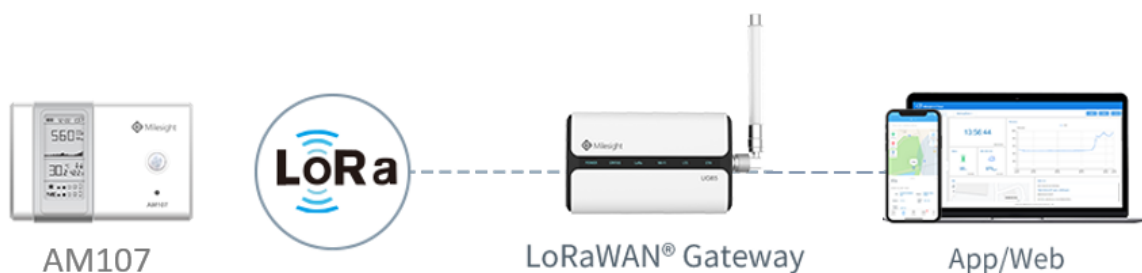
The AM107 is a compact indoor ambience monitoring sensor for measurement of temperature, humidity, light, CO₂ concentration, TVOC, barometric pressure and motion. These data will be shown on the E-ink screen in real-time, which allow to quantify the indoor environment and comfort. The AM107 is widely used for offices, stores, classrooms, hospitals, etc.

Apart from screen display, sensor data is also transmitted using LoRaWAN[®] technology. With this low power consumption technology, the AM107 can work up to 4.2 years with 2 AA 3.6V batteries.

◆ Features

- Integrated with multiple sensors like temperature, relative humidity, CO₂, movement, etc.
- Visual display via E-ink screen
- 3.6V AA batteries
- Up to 4.2 years without replacing batteries
- Compliant with standard LoRaWAN[®] gateways and network servers

◆ Application Example



◆ Specifications

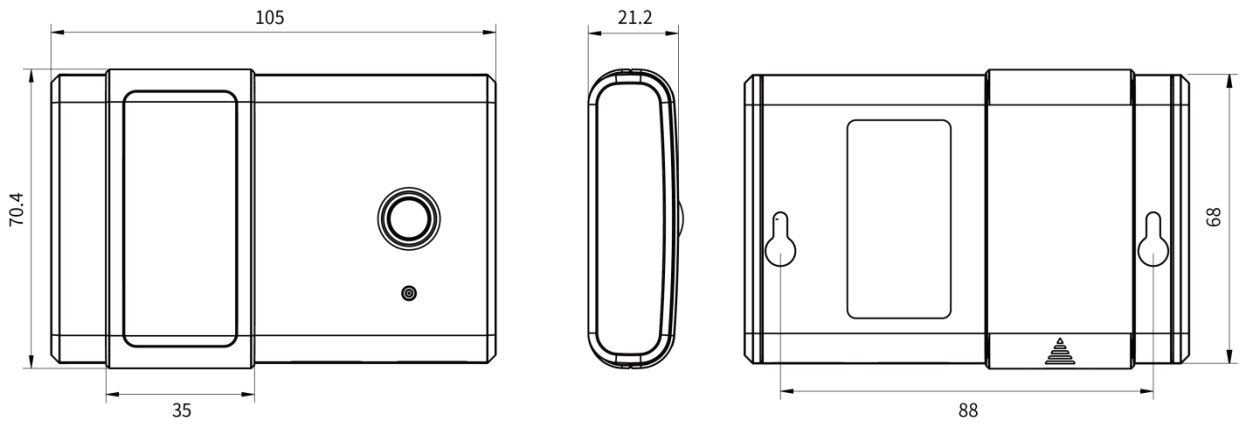
Wireless Transmission	
Technology	LoRaWAN®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A
Sensors	
Temperature	
Range	-20°C to + 70°C
Accuracy	0°C to + 70°C (+/- 0.3°C), -20°C to 0°C (+/- 0.6°C)
Resolution	0.1°C
Humidity	
Range	0% to 100% RH
Accuracy	10% to 90% RH (+/- 3%), below 10% and above 90% RH (+/- 5%)
Resolution	0.5% RH
PIR	
Detection Area	94 ° Horizontal, 82 ° Vertical

Detection Distance	5 m
Output Range	0-65535
Carbon Dioxide (CO₂)	
Range	0 - 5000 ppm
Accuracy	±30 ppm or ±3 % of reading
Resolution	1 ppm
Display	
Display	2.13-inch Black & White E-Ink Screen
Physical Characteristics	
Power Supply	2 × AA 2700 mAh 3.6V ER14505 Li-SOCl ₂ batteries or type-C port power supply
Battery Life* (5 min interval)	Up to 4.2 years (SF7)
Operating Temperature	0°C to +45°C
Relative Humidity	0% to 100% (non-condensing)
Ingress Protection	IP30
Dimension	105 × 70.4 × 21.2 mm (4.1 × 2.8 × 0.8 in)
Installation	Wall Mounting
Approvals	
Regulatory	CE, FCC, LoRaWAN [®] Certified
EMC	EN 55032, EN 55035
EMS	IEC 61000-4-2 Level 3
	IEC 61000-4-3 Level 2
	IEC 61000-4-4 Level 4
	IEC 61000-4-5 Level 3

	IEC 61000-4-6 Level 3 IEC 61000-4-8 Level 4
Radio Frequency	FCC Part 15B, FCC Part 15.247, EN 300 330, EN 301 489-1/3, EN 300 220-1/2
Safety	EN62368-1

* Tested under laboratory conditions and for guideline purposes only.

◆ Dimensions (mm)



◆ PIR Detection Area

