URSALINK

LoRaWAN®

AM100 series
Ambience Monitoring Sensors

AM102

▶ Features

- Robust LoRa connectivity for indoor or HVAC environments
- Integrated multiple sensors like temperature, humidity, light, air quality, etc.
- Easily Configuration via NFC
- Visual display via E-Ink screen
- LoRaWAN v1.0/v1.0.2
- Ursalink Cloud compliant
- Low power consumption (about 1 year battery life)
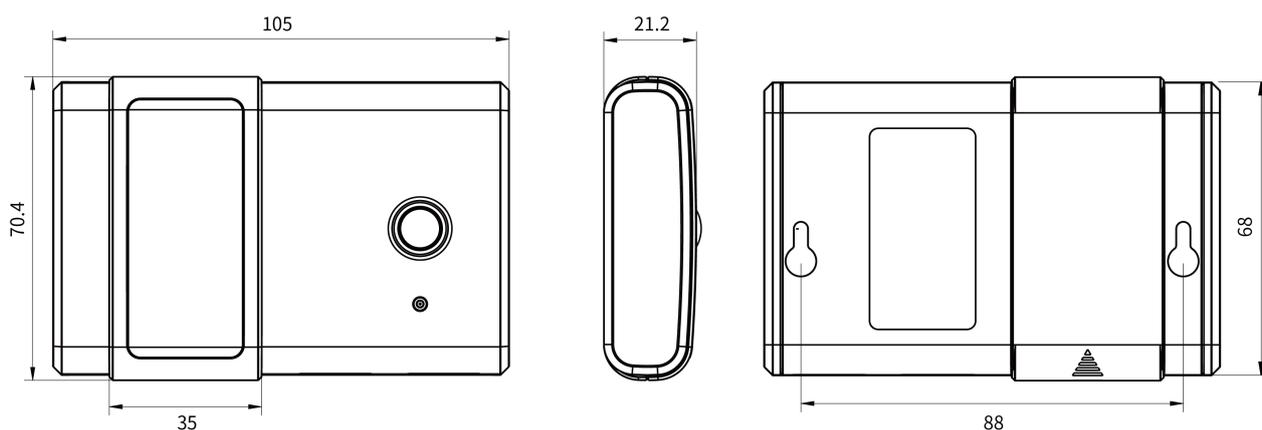- Standard AA alkaline battery

▶ Application Example

AM100 series — LoRa — Ursalink LoRaWAN Gateway — HTTPS RESTful API — Ursalink Cloud — Mobile App / Dashboard

▶ Specifications

Model	AM102	AM100
LoRaWAN		
Frequency	EU433/CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923	
Tx Power	20dBm	
Sensitivity	-147dBm @300bps	
Mode	OTAA/ABP Class A	
Antenna	Embedded Ceramic Antenna	
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)	
Humidity		
Range	0% to 100% RH	
Accuracy	10% to 90% RH (+/- 3%), below 10% and above 90% RH(+/- 5%)	
PIR		
Detection Area	94 ° Horizontal, 82 ° Vertical	
Detection Distance	5 m	
Output Range	0-65535	
Light		
Range	60000 lux (Visible + IR, IR)	
Accuracy	±30%	
CO2		N/A
Range	400 - 5000 ppm	
Accuracy	±30 ppm or ±3 % of reading	

TVOC		
Range	0 - 60000 ppb	N/A
Accuracy	±15 %	
Long-term Stability	1.3 % accuracy drift per year	
Barometric Pressure		
Range	300 - 1100 hPa (-40°C - 85°C)	
Accuracy	±1 hPa	
Display & Configuration		
Display	2.13-inch Black&White E-Ink Screen	
Configuration	1. Mobile APP via NFC 2. PC software via NFC or type-C USB port	
Physical Characteristics		
Power Supply	1. 2 × AA Alkaline battery 2. 5VDC type-C USB power supply	
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)	
Mounting	Wall	

▶ Dimensions

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