

Senstick Ambient SAM20

Senstick Ambient SAM20 is a discreet LoRaWAN ambient sensor for rapid deployment and reliable monitoring of temperature, relative humidity, and air pressure. Its low-profile design blends into its surroundings, while movement detection indicates when the device itself has been moved or tampered with.

Key features

- Harsh environments
- Rigidized housing
- Easy installation
- Motion detection
- NFC configuration

Applications

- Warehouses
- Storages
- Retail



Technical specification



Enclosure	
Weight	24g without batteries / 39g with batteries
Dimensions	132 x 29 x 25mm
Materials	UV stable plastic
IP rating	IP20
Operating conditions	
Temperature	-0°C to +50°C
Humidity	0 to 100% RH
Power supply	
Battery type	1 x 1.5V AA (Industrial lithium recommended)
Expected operation	<7 years (depending on sampling, signal, environment)
Configuration	
Sending interval	Configuration via NFC and downlink
Data upload interval	Configuration via NFC and downlink
NFC configuration	Native Android App

Datasheet

Release: 24.10.2025

Version: 1.0

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Connectivity

Wireless Technology	LoRaWAN® 1.0.3
Wireless Security	LoRaWAN® End-to-End encryption (AES-CTR), Data Integrity Protection (AES-CMAC)
LoRaWAN Device Type	Class A - End-device, Single Frequency (On Request)
Supported regions	US902-928, EU863-870, AS920-923, AU915-928... (All bands available)
Link Budget	137dB (SF7) to 151dB (SF12)
RF Transmit Power	14dBm (Region specific)

Data Logging

Temperature, humidity, AP	Device logs 40 days of data (at 60 min send period), 14 days (at 20 min send period), 10 days (at 15 min send period), or 7 days (at 10 min send period).
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Sensors

SENSIRION

Temperature

Range	0°C to +50°C
Accuracy	±0.2°C

Relative humidity

Range	0% to 100%
Accuracy	±1.8%

Acceleration

Range	±2g to ±16g
Accuracy	±40mg

Air Pressure

Range	300 to 1200hPa
Accuracy (absolute)	±1hPa

Installation options

- Screws (standard)
 - Magnets (Provided on request)
 - Double sided tape (Provided on request)
 - Nail hang (standard)
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