

Senstick Microclimate SMC20

Senstick is an award-winning LoRaWAN sensor. It is designed to operate autonomously for up to 7 years in harsh environments. It is suitable for wide variety of applications where reliable and case specific solution is needed. It combines measurements of temperature, humidity and air pressure.

Key features

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

Applications

- Frost protection
- Thermal comfort in cities
- Machine failure in production
- Harvested yield



Technical specification

Enclosure	
Weight	120g w/ batteries / 170 g with batteries
Dimensions	18mm x 210mm
Materials	UV stable plastic, ALU casing, stainless steel mesh
IP rating	IP65
Operating conditions	
Temperature	-40°C to +85°C
Humidity	0 to 100% RH
Power supply	
Battery type	2 x 1.5V AAA Alkaline
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

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/C (configurable) End-device
Supported regions	US902 –928, EU863 –870, AS923, AU915 –928
Link Budget	137 dB (SF7) to 151 dB (SF12)
RF Transmit Power	14dB / 20 dB (Region specific)

Sensors

Temperature	
Range	-40°C to +85°C
Accuracy	±0.3°C

Relative humidity	
Range	0% to 100%
Accuracy	±2%

Acceleration	
Range	±2g to ±16g
Accuracy	±40mg

Accessories

SMC20-SWP	Solar shield with mounting for poles
SMC20-MCLIP	Snap-on mounting kit, suitable for indoor use
SMC20-MABS	ABS mounting kit. Installation with two screws for indoor and outdoor use
SMC20-MALU	Rigidized ALU mounting kit. Installation with two screws for indoor and outdoor use.

