senzemo

Senstick Soil Moisture SSM30

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. SSM20 is a cost-effective soil moisture sensor.

Key features

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

Applications

- Soil moisture
- Irrigation failure detection
- Soil workability
- Green roofs

Technical specification

Enclosure	
Weight	170g w/ batteries / 230 g with batteries
Dimensions	Casing: 18mm x 230mm / Probe: 20mm x 140 mm
Cable length	0.5 m / 1.5 m / 5 m
Materials	UV stable plastic, ALU casing
IP rating	IP68

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 - End-device
Supported regions	US902–928, EU863–870, AS920-923, AU915–928
Link Budget	137dB (SF7) to 151dB (SF12)
RF Transmit Power	14dBm (Region specific)

Sensors

Temperature	
Range	-40°C to +85°C
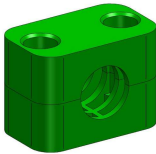
Volumetric water content (VWC)	
Range	0% to 100%

Acceleration	
Range	±2g to ±16g

Accessories

METER EC-5 PROBE	Available with EC-5 soil probe
MPOM10	Snap-on mounting kit, suitable for indoor use
MABS10	ABS mounting kit. Installation with two screws for indoor and outdoor use
MALU10	Rigidized ALU mounting kit. Installation with two screws for indoor and outdoor use.