

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. |

