Soil Moisture Monitoring

farmdeck

powered by Outcomex

Sensor Description

The soil moisture sensor measures moisture, temperature and electric conductivity in the soil.

Using the data gained from the sensors, the Farmdeck app provides insights that helps improve your soil's health and vitality by understanding its watering and temperature needs.
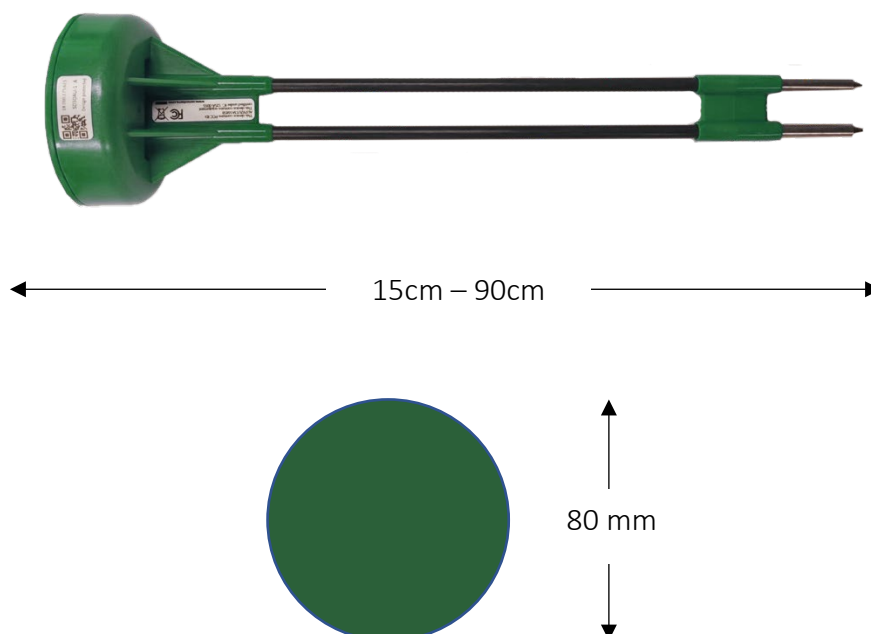
Features

- Accurately measure soil moisture
- Monitor soil temperature
- Moisture and electric conductivity
- Provides an alert based on configurable alerts
- Monitors sensor's battery life and signal strength

Applications

- Plant production
- Pasture management
- Water penetration

15cm – 90cm

80 mm

outcomex

Mechanical Features

Housing	IP76+
Dimensions (mm)	15cm – 90cm
Weight	0.23kg – 0.44kg
Case Material	UV-stabilized ABS plastic

Device Power Supply

Battery	Internal lithium battery (built in)
Expected battery life	5-8 years

Operating Conditions

Temperature	-20ºC to +60 ºC
Voltage	3.0V

Radio/Wireless Connection

Wireless technology	LoRaWAN 1.0.3/1.1 , ADR and OTAA enabled
Supported LoRaWAN device type	Class A End-device
Supported LoRaWAN Regions	EU868, NA915, AU915, AS923, IN8658
Configuration	OTAA, ABP, ADR

Data Type

Soil moisture output	Volumetric Water Content (VWC%)
Soil moisture measurement volume	6.2cm3

Optional Cellular Connection

Wireless Technology	LTE-M/NB/IoT
Supported LTE Bands	LTE-M (Cat-M1): B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66 NB-IoT (Cat-NB1/NB2): B1, B2, B3, B4, B5, B8, B12, B13
SIM card and format	Internal Nano 4FF SIM