

WIRELESS
SOIL MOISTURE
SENSOR SYSTEM

Catalogue



SoilSense

<http://soilsense.io>

SoilSense ABOUT US

Founded in 2017, SoilSense is a company **dedicated to making life easier for farmers through innovative irrigation management solutions.**

With a real-time overview into soil moisture, our solution takes the guesswork out of irrigation, **helping farmers optimize water use, boost yields, and save time.**

What makes us different

Our wireless soil moisture sensor system is quickly installed in the field and connected to a digital dashboard.



The Dashboard shows you **how much water is available for your plants**, providing real-time and **precise irrigation recommendations.**

1.1 Product **DATALOGGER**

Our **wireless, solar-powered datalogger** is optimized to run 365 days using the latest wireless IoT technologies for optimal coverage (NB-IoT and LTE-M), and includes a built-in thermometer for real-time frost protection.



TECHNICAL DETAILS

PHYSICAL PROPERTIES

Dimensions	8.2 cm x 16.2 cm x 5.5 cm
IP-rating	IP66/68 (protected against dust and powerful jets of water from all directions)
Operating environment	-40°C to 60°C
Installation requirements	PH2 Screwdriver, Shovel

ELECTRICAL PROPERTIES

Power source	Built-in solar panel coupled with rechargeable battery
Battery life (with no sun)	3 months
Battery details	3100 mAh rechargeable Li-Ion, 3.7 V
Battery life expectancy	5 years (replacable)
Reset method	Push-button
Channels	4x Sdi12, 2x Analog, 2x Pulse, 2x Watermark

WIRELESS PROPERTIES

Technology	NB-IoT, LTE-M (Cat4), 2G (Cellular fallback)
Data Interface	SDI-12, Analogue, I2C, Flip-switch
Measurement frequency	Default: Every 20 minute, up to once per minute.
Transmission rate	Default: Every 60 min, up to once per minute

1.2 Product TDT SENSORS

TDT sensors are one of the few sensors technology that **provide trustworthy measurements** for irrigation scheduling.



TECHNICAL DETAILS

Measurement	Soil moisture as Volumetric Water Content (VWC)
Technology	TDT
Accuracy of VWC	± 3% VWC (typically ±1% VWC)
Resolution of VWC	0.1% VWC or better
Range of VWC	0-100% (60-100% with limited accuracy)
Soil compatibility	Any mineral soil
Accuracy of soil temperature	± 0.2°C
Resolution of soil temperature	0.01°C
Frequency	150-300 MHz
Dimensions	18.2 cm x 3 cm x 1.2 cm
Cable length	Custom, up to 20 meters

1.3 Product TDR SENSORS



TDR sensors measure soil moisture and electrical conductivity, providing valuable insights to optimize irrigation scheduling.

TECHNICAL DETAILS

Measurement	Soil moisture as volumetric water content (VWC)
Accuracy	± 2% VWC in mineral soils
Resolution of VWC	0.1% VWC or better
Range	0-100%
Salinity accuracy	± 1%, ±35 µS/cm maximum error from 0 to 5000 µS/cm (bulk EC)
Salinity range (bulk EC)	0 to 4000 µS/cm
Salinity range (pore EC)	0 to 55000 µS/cm
Accuracy of soil temperature	± 0.2°C
Resolution of soil temperature	0.1°C
Sensor dimension	15 cm x 3.5 cm x 1.2 cm (default, smaller version also available)
Cable length	Custom, up to 10 meters

1.4 Product RAIN GAUGE

The **rain gauge** is essential for accurately **monitoring rainfall**, helping you make informed decisions about irrigation.



Rain collector, orifice	50 cm ²
Resolution	1 mm rain pr. Tip
Calibration	5 grams pr. Tip.
Accuracy	+/- 5%
PCB 9602 with terminal strip and two reed switches	2 reed switches: NO - normally open; NC - normally closed

2 PRICING Solutions



2 TDT Sensors
1 Datalogger
1 Rain Gauge
Digital Platform

699 €



1 TDT Sensor
1 TDR Sensor
1 Datalogger
1 Rain Gauge
Digital Platform

1049 €



2 TDR Sensor
1 Datalogger
1 Rain Gauge
Digital Platform

1399 €



1 Datalogger

399 €

SUBSCRIPTION

We offer a **flexible subscription model**, allowing you to rent our system at a competitive price.

from **25 €/month**

CONTACTS

Don't hesitate to contact us or check our website if you need assistance to choose the right solution for you.



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