

Multilevel Soil Sensor

Multilevel Soil sensor for smart irrigation systems

TH-SS-XXXX
TH-SS-XXXXEC

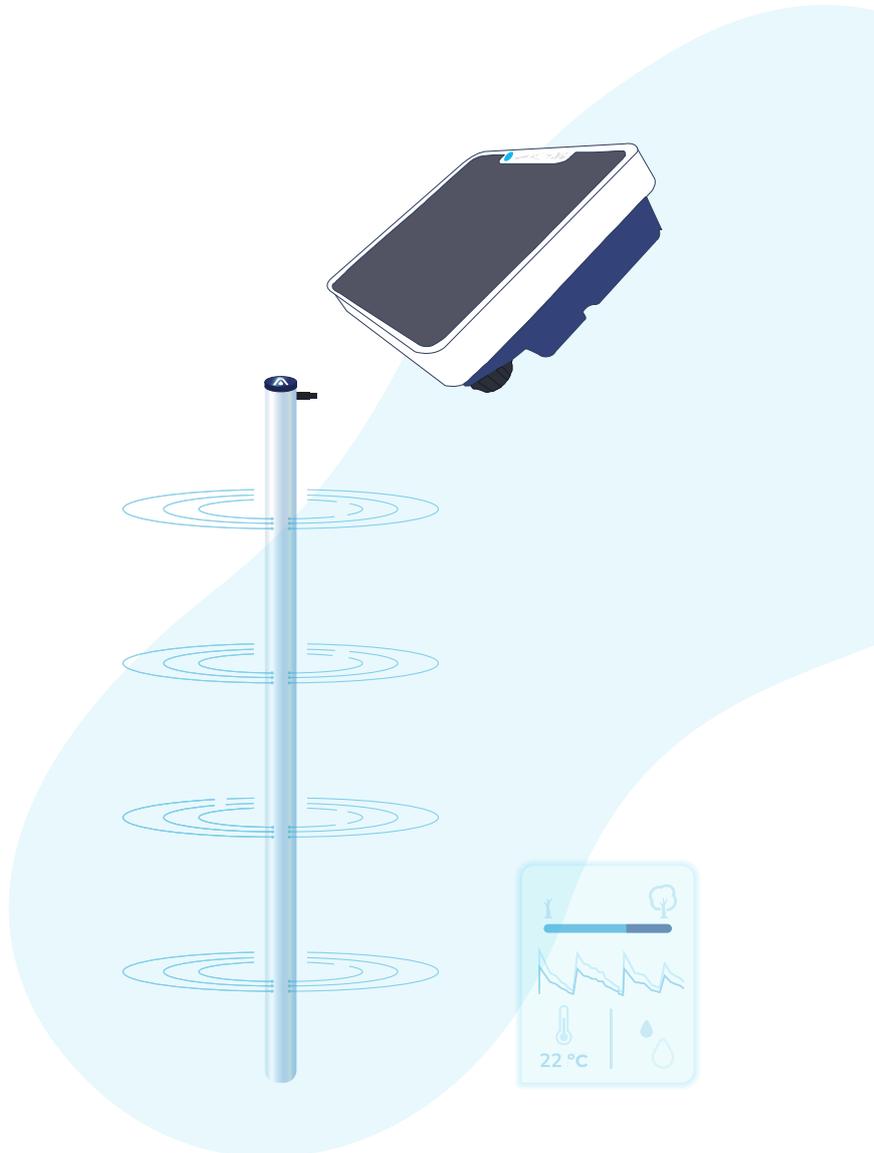
Overview

The SPHERAG multilevel soil sensor measures temperature and volumetric water content (VWC) with high accuracy at different depths (from 10 to 160 cm).

Parameterizing the soil allows decisions to be made to optimize water use, providing water when needed and in the right quantity.

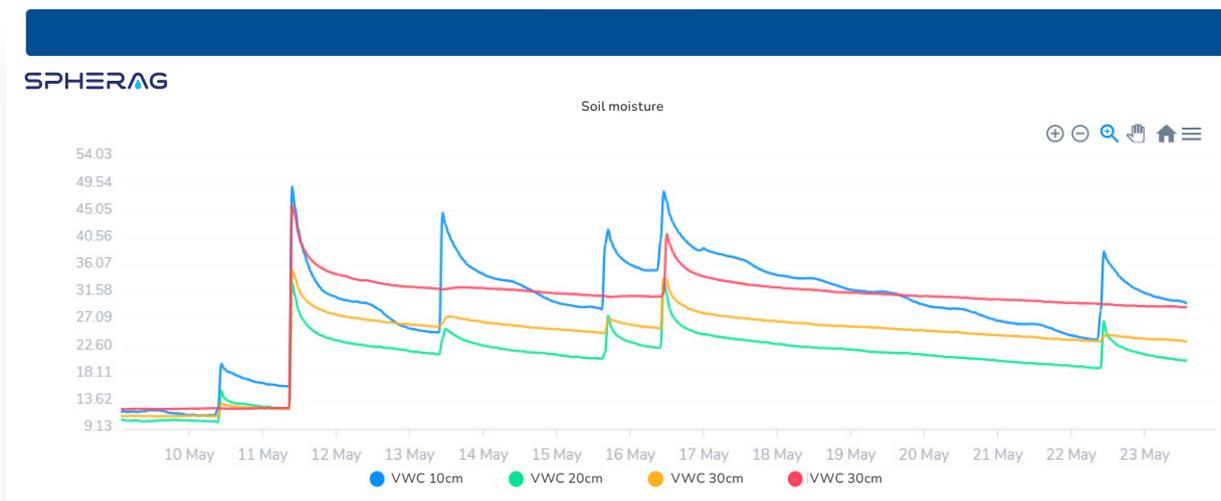
There is also the option to add electroconductivity (EC) measurement.

SPHERAG offers two different models of multilevel sensors that provide the necessary information for each type of crop, offering the possibility to parameterize the soil and monitor the water behavior in real-time, thus adapting the irrigation to optimize its use (see following page).



Sensors at intervals of 10cm suitable for all types of soils.

Spherag platform display



MODEL 1: Multilevel Soil Sensor SPH-SSS-1

SPH-SSS-1XX

General specifications

Working temperature	-20 ~ 60 °C
Supply voltage	12 Vdc
Interface	SDI-12

Mechanical specifications

Sensor dimensions	Ø33.5 mm +/-0.2mm
Cable length	5 m
IP rating	IP68

Soil temperature measurement

Range	-20 ~ 60 °C
Resolution	0.01 °C
Accuracy	±1 °C @ 25 °C

VWC measurement

Range	0 ~ 100%
Resolution	0.01%
Accuracy	2%
Salinity accuracy	±5% @ 0-4 dS/m y 10%-30% VWC

Model	Moisture	Temp	EC	Sensors	Weight (g)	Length (cm)
TH-SS-0040	●	●		4	500	40
TH-SS-0080	●	●		8	900	80
TH-SS-0120	●	●		12	1200	120
TH-SS-0160	●	●		16	1500	160
TH-SS-0040EC	●	●	●	4	500	40
TH-SS-0080EC	●	●	●	8	900	80
TH-SS-0040EC	●	●	●	12	1200	120
TH-SS-0160EC	●	●	●	16	1500	160

MODEL 2: Multilevel Soil Sensor SPH-SSS-2

SPH-SSS-2XX

General specifications

Working temperature	-20 ~ 60 °C
Supply voltage	12 Vdc
Interface	SDI-12

Mechanical specifications

Sensor dimensions	Ø30 mm +/-0.2mm
Cable length	5 m
IP rating	IP68

Soil temperature measurement

Range	-20 ~ 60 °C
Resolution	0.3 °C
Accuracy	±2 °C @ 25 °C

VWC measurement

Range	0 ~ 100%
Resolution	0.01%
Accuracy	2%
Salinity accuracy	±5% @ 0-4 dS/m y 10%-30% VWC

Model	Moisture	Temp	EC	Sensors	Weight (g)	Length (cm)
TH-SS-0010	●	●		1	400	10.5
TH-SS-0030	●	●		3	550	30
TH-SS-0060	●	●		6	750	60
TH-SS-0090	●	●		9	1000	90
TH-SS-0120-S	●	●		12	1200	120
TH-SS-0010EC	●	●		15	1500	150
TH-SS-0030EC	●	●	●	1	400	10.5
TH-SS-0060EC	●	●	●	3	550	30
TH-SS-0090EC	●	●	●	6	750	60
TH-SS-0120-EC-S	●	●	●	9	1000	90
SPH-SSS-210	●	●	●	12	1200	120
SPH-SSS-211	●	●	●	15	1500	150