



Summary

Our invisible moisture sensors play an essential role in our sustainable approach to tree management. A sensor is placed in the soil during planting or maintenance of a tree and constantly monitors the moisture content of the soil. The collected data from a moisture sensor is translated into a clear dashboard, with which you can see exactly where and when a tree needs water. It is almost as if the tree can talk to its manager. If, after a number of years, the monitored tree is thriving and no longer requires special care, the sensor can easily be transferred to a new location.

Connectivity

LoRaWAN	Highly sensitive radio receiver is available in 868 (Europe) or 915 (USA, Canada) MHz versions.
LoRaWAN Regions	EU868 (Europe), US915 (USA, Canada)

Maintenance

Replaceable batteries	3x AA
Battery type	Lithium
Battery life	~ 1 year

Casing

Dimensions	75mm in diameter and 130mm in length
Weight (including batteries)	487 grams
Material	Polyvinyl chloride
IP-code	IP68
Temperature	-20 °C to 60 °C
Humidity	0 to 100 %
Installation	Just below ground level or optionally in a drainage pipe

Location

Manual	Using software
GPS antenna (optional)	Internal

Security

Data security (LoRaWan)	AES-128 encryption
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Soil moisture - Volumetric Water Content (VWC)

Range	0 – 0.5 m ³ /m ³ (0 – 50 % VWC)
Accuracy	± 0.03 m ³ /m ³ (± 3 % VWC)
Resolution	± 0.001 m ³ /m ³ (0.1 % VWC)
Temperature drift	Typically, less than 0.002 m ³ /m ³ (0.2 % VWC)
Temperature	2 to 45 °C
Dimensions	170 mm x 25 mm x 15 mm (L x W x H)
Weight	52 grams
Cable length	120 cm Please contact us if a non-standard cable length is required.
Lifespan	> 3 years

Warranty

Factory warranty

1 year if it can be demonstrated that it concerns a manufacturing defect. In case of improper use, repair costs will be charged.

Contact

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