



Sensor specifications

Soil moisture sensor EC-5

Determine the volumetric water content (VWC) by measuring the dielectric constant of the medium using capacitance and frequency domain technology to provide accurate measurements of all soils and soilless media with a wide range of salinities.



Specifications

Operating conditions	Temperature	-40 to 60°C
Structural	Dimensions (L x W x H)	51 x 24 x 75 mm
	Weight	72g
	Mounting options	The spikes of the sensor should be inserted in the substrate

Measurement specifications

Volumetric Water Content (VWC)	Range	0.00 to 3.64 m ³ /m ³ (Mineral soil calibration) 0.0 to 0.7 m ³ /m ³ (Soilless media calibration) Apparent dielectric permittivity (ϵ_a): 1 (air) to 80 (water)
	Accuracy	± 0.03 m ³ /m ³ (Mineral soil calibration, EC lower than 8 dS/m) ± 0.05 m ³ /m ³ (Soilless media calibration, EC lower than 8 dS/m) ± 0.01 to 0.02 m ³ /m ³ (Medium specific calibration in any porous medium) Apparent dielectric permittivity (ϵ_a): 1 to 40 (soil range), $\pm 1 \epsilon_a$ (unitless) 40 to 80, 15% of measurement
	Resolution	0.001 m ³ /m ³





30MHz Connect

Every 30MHz sensor is powered by the Connect. It acts like the middleman between the sensor and the platform. This casing protects the electronics from greenhouse environment like moisture, dirt, and changing climate conditions.

The connect comes with a universal mounting bracket.



Specifications

Operating conditions	-10 to 55 °C (10 to 45°C while charging)
Dimensions (L x W x H)	Case: 183 x 113 x 107 mm Mounting bracket: 165 x 210 x 205 mm
Range	Indoors from 200 to 400 m (depending on Greenhouse layout)
Power source	Rechargeable battery (duration dependent on the sensor connected)
Protection	Water and dust according to IP67

