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Unit	10HS Soil Moisture Sensor
Part. No	ECH510



Parameters	
Accuracy	ϵ^a : ± 0.5 from ϵ^a of 2 to 10 - ± 2.5 from ϵ^a of 10 to 50
VWC Using standard calibration equation	$\pm 0.03 \text{ m}^3/\text{m}^3$ ($\pm 3\%$ VWC) typical in mineral soils that have solution electrical conductivity $< 10 \text{ dS/m}$
Using soil specific calibration	$\pm 0.02 \text{ m}^3/\text{m}^3$ ($\pm 2\%$ VWC) in any soil resolution: ϵ^a : 0.1 from ϵ^a of 1 to 30, 0.2 from ϵ^a of 30 to 50
Using in mineral soils	$0.0008 \text{ m}^3/\text{m}^3$ (0.08% VWC) from 0 to 0.50 m^3/m^3 (0-50% VWC)
Range	ϵ^a : 1 (air) to 50 - VWC: 0 - $0.57 \text{ m}^3/\text{m}^3$ (0 - 57% VWC)
Measurement time	10 ms
Sensor type	Frequency domain
Output	Voltage, correlated linearly with VWC, independent of excitation voltage
Operating environment	-40°C to $+50^\circ\text{C}$
Power	3 VDC @ 12mA to 15 VDC @ 15 mA
Cable length	5 m
Connector types	stripped and tinned lead wires (3)
Dimensions	14.5 x 3.3 x 0.7 cm