

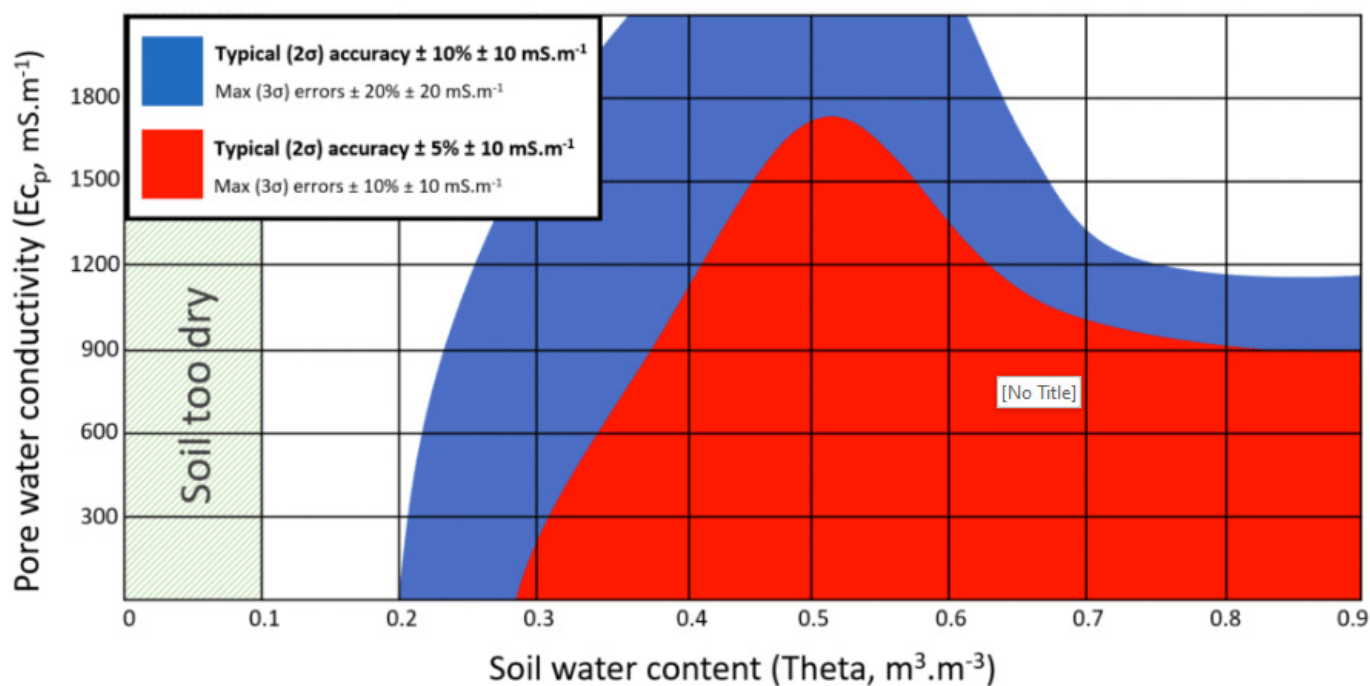
Specification

WET150 Sensor

	VOLUMETRIC WATER CONTENT	PORE WATER CONDUCTIVITY (EC _p)	PERMITTIVITY	BULK CONDUCTIVITY (EC _b)	TEMPERATURE
ACCURACY	± 0.03 m ³ .m ⁻³ (3%)	See graph below this table	± (3% of reading + 0.8 ε') 1 → 40 ± 5% of reading 40 → 80	± (10mS.m ⁻¹ + 6%)	± 0.5°C (0°C to +40°C range) ± 0.7°C (-20°C to +60°C range)
RANGE	Full range: 0 to 1.0 m ³ .m ⁻³ Accurate range: 0.05 to 1.0 m ³ .m ⁻³ EC _b 0 to 500 mS.m ⁻¹	See graph below this table	for EC _p ≤ 800 mS.m ⁻¹ 1 → 40 for EC _p ≤ 500 mS.m ⁻¹ 40 → 80	from 0 to 1200 mS.m ⁻¹	Full range: -20°C to +60°C Accurate range: 0°C to +40°C
OUTPUT	SDI-12 protocol 1.3 (www.sdi-12.org) Providing water content, pore water conductivity, and temperature - together with base readings of permittivity and bulk conductivity. Outputs are exceptionally configurable.				
POWER REQUIREMENT	Operating voltage: 6 to 20 Volts Current consumption (typical values powered from 12 Volts): Active sensing: 22 mA average over 12 ms (average includes short peaks at 45 mA) Active results computation: 2 mA over 188 ms Idle: <0.5mA				
ENVIRONMENTAL	IP68, - 20 to + 60°C				
SAMPLE VOLUME	~55 x 70 mm diameter Sample volume is weighted towards soil immediately surrounding the rods				
DIMENSIONS	Overall: 143 x 40 mm dia Rods: 51 mm x 2.5 mm dia				
WEIGHT	Weight: 77g (excl. cable)				
SENSOR CALIBRATIONS	Individual sensors are interchangeable Recalibration advised every 5 years (depending on use)				
SOIL CALIBRATIONS	The WET150 Sensor comes complete with calibrations for mineral and organic soils plus coir, peat, and mineral wool substrates				

Accuracy and range chart on next page

Pore water conductivity accuracy



Notes: [1] The WET150 has been carefully optimised to provide accurate readings in soils and substrates - readings taken in water or air may not meet the full specification. [2] The EC_p contour map is based on measurements from 30 sensors at 20°C in NPL* traceable media. Calculated EC_p readings are derived from the Hillhorst equation, using the generalised "mineral" soil calibration and the default soil parameter = $4.1 * NPL$ is the UK's National Metrology Institute, developing and maintaining the national primary measurement standards.

WET150 Meter

INPUT CONNECTIONS	1 WET150 multi-parameter water content sensor
CONFIGURATION	By keypad
SENSOR EXCITATION	Via SDI-12
POWER	2 x AA alkaline batteries
BATTERY LIFE	> 2400 readings
ENCLOSURE RATING	IP65
TEMPERATURE RANGE	0 to +40°C
DISPLAY	2 line x 16 character
SIZE	130 x 66 x 25