



Effectively Measures (EC) of Water in Pipes and Tanks

Small, Durable and Efficient.

Overview

The ES-2 Electrical Conductivity Sensor is designed to measure the electrical conductivity in pipe water or tank water (when used with protective cap). When paired in the soil with the GS3 or STE, the ES-2 indicates the amount of salts that are going into your system as well as the salts remaining in your soil or substrate.

The ES-2 measures temperature using an onboard thermistor, and electrical conductivity using a stainless steel electrode array. The integrated 4-probe electrical conductivity transducer

accurately senses EC up to 120 mS/cm. The electronic circuitry is encapsulated in a marine-grade epoxy to protect the sensor in corrosive environments.

The ES-2 is 2.2 cm in diameter, 11 cm length and has a ½ inch pipe with standard National Pipe Thread (NPT) which makes it ideal to fit into small spaces and to use on threaded pipes and fittings.

Specifications

Range	
Electrical Conductivity	0 to 120 dS/m
Temperature	-40 °C to 50 °C
Resolution	
Electrical Conductivity	0.001 dS/m
Temperature	0.1 °C
Accuracy	
Electrical Conductivity	± 0.01 dS/m or ± 10 % (whichever is greater)
Temperature	± 1 °C

Operating temperature	
Operating temperature	-40 °C to 60 °C
	Sensors can be used at higher temperatures under some conditions.
Power Requirements	
Power Requirements	3.6 – 15 VDC, 0.03 mA quiescent, 0.5 mA during 300 ms measurement
Dimensions	
Dimensions	ES-2 Housing: 2.2 cm Diameter, 11 cm length

ES-2F Housing: 1.5 cm Diameter,
9.2 cm length

Thread Requirements

Thread Requirements 1/2 inch NPT thread

Measurement Time

Measurement Time 300 ms (milliseconds)

Output

Output 3.6 Volts Levels or SDI-12

Connector Types

Connector Types Stripped & tinned lead wires

Cable Length

Cable Length 5 m standard; custom lengths
available upon request

Data Logger Compatibility (Not Exclusive)

Data Logger Compatibility (Not Exclusive) *Campbell Scientific: CR10X,
CR850, 1000, 3000, etc.

Included

Included Screw-on protective cap for ES-2
use in tanks

For comprehensive details, visit: www.campbellsci.ca/es-2 



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