



Better Signal Performance

Internal amplifier boosts signal for less interference

Overview

The CSIM11-ORP, manufactured by Wedgewood Analytical, measures oxidation reduction potential (ORP) of liquids. It can be submerged in water or inserted into tanks, pipelines, and open channels. The CSIM11-ORP is intended for non-

pressurized systems and was not designed for applications above 30 psi. Please contact Campbell Scientific for recommendations on probes suitable for installations in pressurized pipes.

Benefits and Features

- › Internal amplifier boosts the signal, decreasing signal interference
- › Titanium ground rod runs inside the outer body to eliminate ground loop errors
- › Compatible with most Campbell Scientific data loggers
- › Porous polytetrafluoroethylene (PTFE) liquid junction is less susceptible to clogging as compared to conventional reference junctions
- › Plunger-style pH glass electrode allowing the probe to be mounted at any angle

Detailed Description

The CSIM11-ORP is similar to the CSIM11, but includes a 0.2-in. platinum band wrapped around the glass electrode, which allows the CSIM11-ORP to respond to the electron density in the fluid. It has a plunger-style pH glass electrode that allows the CSIM11-ORP to be mounted at any angle. The probe's porous polytetrafluoroethylene (PTFE) liquid junction is less susceptible to clogging as compared to conventional reference junctions.

A titanium ground rod runs inside the PPS outer body to eliminate ground loop errors. An internal amplifier boosts the signal, decreasing signal interference. The amplifier is powered

by two internal lithium batteries, and thus does not require any current from the data logger. These batteries are designed to last the lifetime of the probe.

The reference solutions and bulb configuration are optimized for natural water applications. Alternate reference solutions and bulb configurations are available. Contact Campbell Scientific for pricing and availability.

Note: The CSIM11-ORP uses glass bulb technology which has a life expectancy of around 6 months to 2 years, depending on the conditions of the water.

Specifications

Output	Analog
ORP Range	-700 to +1100 mV
Operating Temperature Range	0° to 80°C
Pressure Range	0 to 30 psig
Accuracy	±0.1% (over full range)
Impedance	< 1 Mohm (@ 25°C)
Reference Cell	Single Junction KCl/AgCl
Body Material	ABS

Wetted Materials	ABS, polytetrafluoroethylene (PTFE), Viton, glass, titanium
Cable Jacket Material	Polyurethane
Response Time	95% of reading (in 10 s)
Drift	< 2 mV per week
Internal Lithium Battery Lifetime	5 years (life of probe)
Diameter	3.0 cm (1.2 in.)
Length	17.8 cm (7.0 in.)
Weight	0.5 kg (1 lb) with 4.57-m (15-ft) cable

For comprehensive details, visit: www.campbellsci.com/csim11-orp 



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