



## Better Signal Performance

Internal amplifier boosts signal for less interference

### Overview

The CSIM11, manufactured by Wedgewood Analytical, measures the full pH range of liquids. It can be submerged in water or inserted into tanks, pipelines, and open channels. The CSIM11 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 dataloggers
- › 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 has a plunger-style pH glass electrode that allows the CSIM11 to be mounted at any angle. Its 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 power from the datalogger. 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 uses glass bulb technology which has a life expectancy of around 6 months to 2 years, depending on the conditions of the water.

## Specifications

pH Range	0 to 14
Zero Potential	7.0 pH $\pm$ 0.2 pH
Sodium Error	< 0.05 pH (in 0.1 Molar Na <sup>+</sup> ion at 12.8 pH)
Output	$\pm$ 59 mV/pH unit
Operating Temperature Range	0° to 80°C
Pressure Range	0 to 30 psig
Accuracy	$\pm$ 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 y (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.au/csim11](http://www.campbellsci.com.au/csim11)



Campbell Scientific Australia | 411 Bayswater Road | Garbutt, QLD 4814 | +61 (0)7 4401 7700 | [www.campbellsci.com.au](http://www.campbellsci.com.au)  
AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | THAILAND | SOUTH AFRICA | SPAIN | UK | [USA](#)

© 2018 Campbell Scientific, Inc. | 06/19/2018