

# Orion 2002SS and 2002CC Conductivity Cells

For a wide range of conductivity applications

As water is the universal solvent, it is used across a multitude of industrial processes. Conductivity measurements are an essential measurement for most industrial processes, from ultra pure water to final treatment applications. The measurement of specific conductivity related to impurities in an aqueous solution related to the concentration of dissolved chemicals is becoming increasingly more important for efficient process control. The mobility and valence of the ions in solution have an effect on the conductivity. Most ionic solutions will exhibit a linear increase in conductivity with a rise in temperature; however ultra pure water with specific compounds requires special compensation to obtain accurate results. Our industrial line of conductivity probes and monitors are designed for durability, reliability and high performance results every time.

Our Thermo Scientific™ Orion™ 2002SS 2-electrode conductivity cell is stainless steel, with a cell constant of 0.1 cm<sup>-1</sup>. This sensor, with its low cell constant value, is designed to provide high accuracy in low conductivity, ultra pure water and pure water samples in a process environment. Built with 316 stainless steel, this high purity sensor provides months of accurate measurements with virtually no maintenance between calibrations.

## Markets

- Power Generation
- Pulp and Paper
- Semiconductor
- Process Water
- Industrial Water
- Drinking Water
- Pharmaceutical



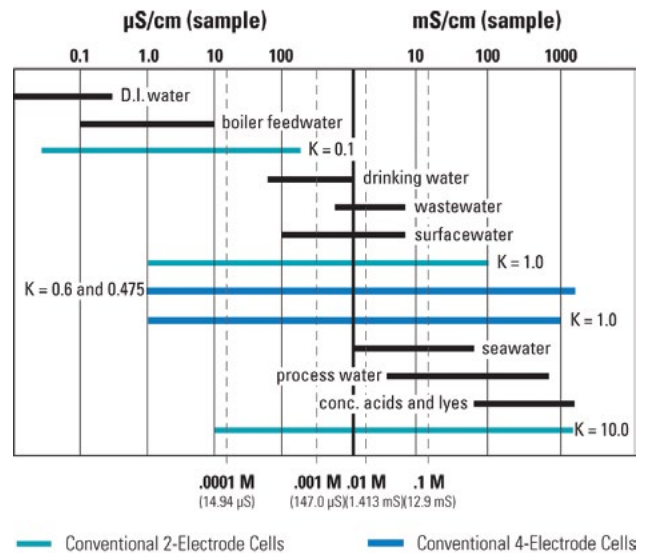
## Applications

- Bottled and Municipal Water
- Boiler Chemistry
- Cooling Tower
- Manufacturing
- Steam/Condensate
- Fabrication
- Water for Injection
- Electroplating

## Product Information - 2002CC Conductivity Cell

The 2002CC 4-electrode conductivity cell is an epoxy body sensor, with a cell constant of  $0.475 \text{ cm}^{-1}$ . This sensor is ideal for high and standard conductivity samples across a variety of industrial applications. The 4-electrode design compensates for the electrode fouling, cable and connector resistance, and polarization errors. The epoxy/graphite cell material is extremely durable and chemically resistant.

For more information or to contact your local Thermo Scientific water quality specialist, call 1-800-225-1480 or visit our website at [thermofisher.com/processwater](http://thermofisher.com/processwater).



## Product Specifications Table

2002CC 2-Electrode and 4-Electrode Conductivity Cells		
Property	2002CC 2002CC10M	2002SS 2002SS10M
Body material	Epoxy	Stainless steel
Electrode type	4-electrode cell	2-electrode cell
Electrode material	Graphite	Stainless steel
Measuring range	10 $\mu\text{S/cm}$ to 200 $\text{mS/cm}$	0.01 $\mu\text{S/cm}$ to 300 $\mu\text{S/cm}$
Nominal cell constant	$0.475 \text{ cm}^{-1}$	$0.1 \text{ cm}^{-1}$
Temperature range	-5 to $100^\circ\text{C}$	-5 to $100^\circ\text{C}$
Automatic temperature compensation	Yes, 30 $\text{k}\Omega$ NTC	Yes, 30 $\text{k}\Omega$ NTC
Maximum pressure	100 psi (6.9 bar)	100 psi (6.9 bar)
Cable length	5 meters (16.4 ft) 10 meters (32.8 ft)	5 meters (16.4 ft) 10 meters (32.8 ft)

## Ordering information

Description	Cat. No.
Flow cell adaptor for 2002CC	2002AD
Flow cell adaptor in PPHP for 2002CC	2002ADB
Epoxy/graphite 4-electrode conductivity cell with 5 meter cable, includes 1 x 60 mL bottle each of 100 $\mu\text{S/cm}$ , 1413 $\mu\text{S/cm}$ 12.9 $\text{mS/cm}$ and 111.9 $\text{mS/cm}$ conductivity standards	2002CC
Epoxy/graphite 4-electrode conductivity cell with 10 meter cable, includes 1 x 60 mL bottle each of 100 $\mu\text{S/cm}$ , 1413 $\mu\text{S/cm}$ 12.9 $\text{mS/cm}$ and 111.9 $\text{mS/cm}$ conductivity standards	2002CC10M
Stainless steel 2-electrode conductivity cell with 5 meter cable, includes 1 x 60 mL bottle of 100 $\mu\text{S/cm}$ standard	2002SS
Stainless steel 2-electrode conductivity cell with 10 meter cable, includes 1 x 60 mL bottle of 100 $\mu\text{S/cm}$ standard	2002SS10M
Flow cell 2002SS (with adaptors) and 2002CC conductivity cells	2002FC
Flow cell in PPHP	2002FCB
111.9 $\text{mS/cm}$ conductivity standard, 5 x 60 mL bottles	011005
12.9 $\text{mS/cm}$ conductivity standard, 5 x 60 mL bottles	011006
1413 $\mu\text{S/cm}$ conductivity standard, 5 x 60 mL bottles	011007
100 $\mu\text{S/cm}$ conductivity standard, 5 x 60 mL bottles	011008

Find out more at [thermofisher.com/processwater](http://thermofisher.com/processwater)