

We offer superior performance across a wide range of conductivity applications — to ensure optimum results with the confidence you have come to expect. Let us show you how protect your most critical and expensive equipment with peace of mind and minimal maintenance.

Thermo Scientific Orion 2002SS and 2002CC Conductivity Cells



Markets

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

Applications

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

Wide Range of Analysis with Tight Control Over Accuracy and Precision

As water is the universal solvent, it is used across a multitude of industrial processes. Conductivity measurements are an essential measurement for most industrial process, 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.

2002SS Conductivity Cell

The 2002SS 2-electrode conductivity cell is stainless steel, with a cell constant of 0.1 cm^{-1} . 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.



2002CC Conductivity Cell

The 2002CC 4-electrode conductivity cell is an epoxy body sensor, with a cell constant of 0.475 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.

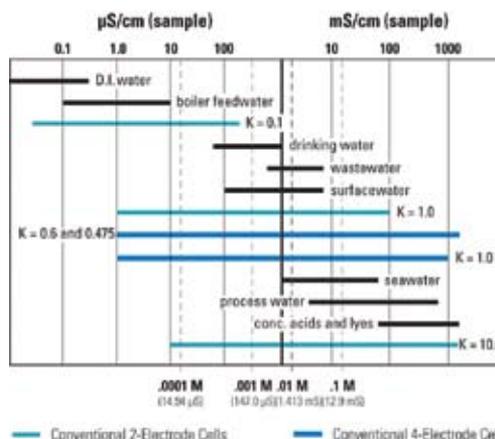


Chart 1 – Typical Operating Ranges of Conductivity Cells

2-Electrode and 4-Electrode Conductivity Cells

Specifications		
Property	2002CC	2002SS
Body Material	Epoxy	Stainless steel
Electrode Type	4-electrode cell	2-electrode cell
Electrode Material	Graphite	Stainless steel
Measuring Range	10 μS/cm to 200 mS/cm	0.01 μS/cm to 300 mS/cm
Nominal Cell Constant	0.475 cm ⁻¹	0.1 cm ⁻¹
Temperature Range	-5 to 100 °C	-5 to 100 °C
Automatic Temperature Compensation	Yes, 30 kΩ NTC	Yes, 30 kΩ NTC
Maximum Pressure	100 psi (6.9 bar)	100 psi (6.9 bar)
Cable Length	5 meters (16.4 ft)	5 meters (16.4 ft)

Ordering Information	
Cat. No.	Description
2002CC	Epoxy/graphite 4-electrode conductivity cell with 1 x 60 mL bottle each of 100 μS/cm, 1413 μS/cm 12.9 mS/cm and 111.9 mS/cm conductivity standards
2002SS	Stainless steel 2-electrode conductivity cell with 1 x 60 mL bottle of 100 μS/cm conductivity standard
2002FC	Flow cell and adapters for 2002SS and 2002CC conductivity cells
011005	111.9 mS/cm conductivity standard, 5 x 60 mL bottles
011006	12.9 mS/cm conductivity standard, 5 x 60 mL bottles
011007	1413 μS/cm conductivity standard, 5 x 60 mL bottles
011008	100 μS/cm conductivity standard, 5 x 60 mL bottles

For more information or to contact your local Thermo Scientific water quality specialist, call 1-800-225-1480 or visit our website at www.thermo.com/process.

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