

Greater stability and reliability, with ± 0.02 pH accuracy over long periods of time. Virtually drift resistant, saving valuable time by reducing calibration frequency while maximizing up-time!

Thermo Scientific Orion 2001SC

High Purity ROSS® pH Electrode



High Purity Water pH Measurements with Complete Assurance

The Thermo Scientific Orion 2001SC high purity ROSS pH electrode is a combination electrode designed for online applications when the highest accuracy and precision are required. The pH sensing and reference electrodes are combined into a single electrode best suited for high purity measurements. The 2001SC electrode is designed to be used in the Thermo Scientific Orion stainless steel flow cell, which holds and positions the electrode for optimal results.

The 2001SC high purity ROSS pH electrode is a research-grade electrode engineered specifically for use in online pH measurement applications. It is designed with a sidearm, for attachment to a reservoir of specially formulated ROSS reference filling solution. This ensures the outer reference chamber is always full, allowing the ceramic liquid junction to flow freely.

With its unique internal element system, the high purity ROSS pH electrode provides superior stability, faster response and greater accuracy than other conventional electrodes with silver chloride or calomel internal systems. The electrode response is fast; even in samples varying by 50 °C or more. Drift is less than 0.002 pH units per day, eliminating the need for frequent standardization.

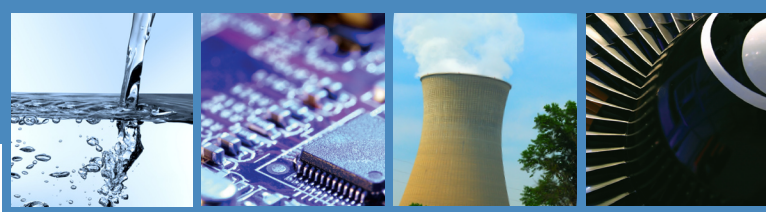
The ROSS internal system is designed to have virtually zero temperature coefficient, that is, the potential difference between the elements is zero regardless of the difference in the temperature of the elements. The internal elements of the combination pH electrodes are housed in an electrode body that, in use, is partially immersed in the sample and partially exposed to the ambient air. Thus, the internal elements may be at different temperatures.

Markets

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

Applications

- Boiler Water
- Condensate
- Bottling Water
- Municipal Water
- Water for Injection
- Water for Fabrication



**2001SC High Purity ROSS
Electrode Benefits**

- Unmatched drift-free reference system — with precision of 0.02 pH
- Reliable, reproducible results in high purity samples
- Fastest response for online pH electrodes
- Unparalleled pH response to temperature changes
- Eliminates junction potential problems associated with conventional electrodes
- Industry leading UPW pH sensor technology is compatible with standard terminal connections on most pH controllers

Specifications	
pH Range	0 to 14 pH
Temperature Range	0 to 100 °C
Drift	Less than 0.002 pH units
Slope	92 to 102% (54.4 to 60.3 mV/dec)
Isopotential Point	pH 7
Junction	Ceramic frit
Internal Reference	ROSS
Size	Electrode Diameter: 12 mm Electrode Length: 125 mm Electrode Cap Diameter: 16 mm Electrode Cap Length: 30 mm
Detachable Cable	Coaxial
Cable Length	1 meter
Filling Solution	ROSS reference filling solution

*Specifications are subject to change without notice

Cat. No.	Description
2001SC	High purity ROSS glass pH electrode with screw cap connector (Requires additional purchase of ATC probe and electrode cable)
2001FS	ROSS internal fill solution, (5) x 2 oz. bottles
2001F4	ROSS internal fill solution, (4) x 4 oz. bottles
2001FC	Stainless steel (316) flow cell with mounting bracket
2001EC	Electrode cable, 1 meter (screw cap to tinned leads)
20015M	Electrode cable, 5 meter (screw cap to tinned leads)
2001XM	Electrode cable, 10 meter (screw cap to tinned leads)
2001TM	ATC probe, stainless steel, PT1000, 5 meter cable (tinned leads)
2001TP	ATC probe, stainless steel, NTC 30k ohm, 1 meter cable (tinned leads)
910104	pH 4.01 buffer, 475 mL bottle
910107	pH 7.00 buffer, 475 mL bottle
910110	pH 10.01 buffer, 475 mL bottle
810001	ROSS pH electrode storage solution, 475 mL bottle
900021	pH cleaning solution A for protein contaminants, 4 x 30 mL bottles
900022	pH cleaning solution B for general cleaning and bacterial contaminants, 4 x 60 mL bottles
900023	pH cleaning solution C for general cleaning, 4 x 30 mL bottles
900024	pH cleaning solution D for oil and grease contaminants, 4 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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