

# Model K29D TPW MAINTENANCE BATH

### MODEL K29D

# **Water Triple Point Cell Maintenance System**

Streamlined and simplified for cost-efficiency, the all new K29D Water Triple Point Cell Maintenance System offers a practical, reliable environment to realize this fundamental fixed point with the smallest bench footprint of any system available.

The system consists of a specialty mirrored-glass dewar, protected by a flexible plastic web and mounted on a sturdy aluminum safety base. A core assembly, made of durable plastic to resist corrosion, protects the cell while in the bath and keeps it centered, helping to ensure even mantle maintenance. The core assembly easily lifts out, allowing for easy cleaning and exchanging of the bath fluid. An insulated cap minimizes heat transfer into the unit and holds the cell securely upright in the core assembly.

Requiring less than 5 liters of fluid, the system can maintain a triple point of water mantle virtually indefinitely with minimal operator time. Its unique counter-flow design provides a constant flow of thermally conditioned fluid around the cell, creating a stable, uniform environment for maintaining the mantle. To use the system, users simply turn on the system, insert the cell and allow it to cool to operating temperature, then form an ice mantle by any of the standard methods to realize the defining fixed point.

Used in conjunction with Pond Engineering's Model K29i (Immersion Cooler) or K29iX (Direct Expansion Cooler), a chilled cell can be prepared for use with less than 10 minutes of technician time, with a fully formed mantle in approximately 30 minutes.

The Model K29D is the lowest-cost, smallest footprint maintenance system available, and is an extremely easy-to-use system that provides a solid foundation for calibrations at the Triple Point of Water.

## TO ORDER, OR FOR MORE INFORMATION:

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#### **SPECIFICATIONS**

System Ambient 15°C to 30°C Operating Range:

Main Well: Impact Absorbing Plastic

> ≈3" (76 mm) I.D. ≈15" (38 cm) deep

Pre Cool Port: ≈0.312" (8.0 mm) I.D.

Power Requirements: 90 to 264 Volts

> 1.5 Amps max. A.C. 47 - 63 Hz.

System Physical Dimensions: 8" (20 cm) wide

> 13.5" (34 cm) deep 22.5" (57 cm) high

Benchtop Footprint 7.5" (19 cm) wide

11.5" (29 cm) deep

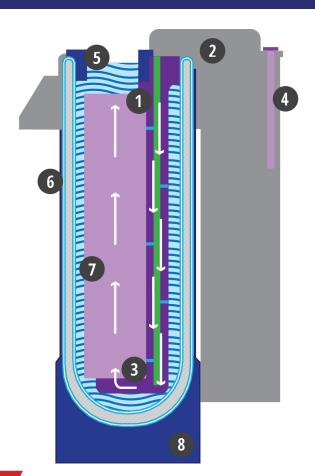
This system is compatible with standard size commercially available cells and can be ordered to work with almost any Triple Point of Water cell.

All specifications subject to change without notice.

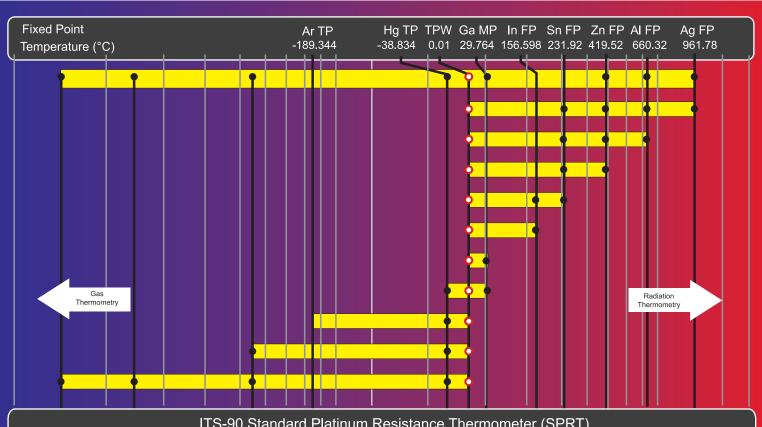
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# **KEY TECHNICAL FEATURES**

- Unique counter-flow design provides a stable, uniform environment for exceptional mantle lifetime with minimal technician time required
- Efficient, innovative system design in conjunction with solid-state cooling allows for virtually silent operation, unlike typical vapor compression refrigeration systems
- Entire core assembly simply lifts out for maintenance and cleaning of system components
- Convenient probe storage (able to accept probes up to 300°C) located on rear of unit keeps probes safe and still within reach
- Insulated cap holds cell upright in core assembly and reduces heat transfer into system
- Flexible plastic web encloses the glass dewar for safety and protection
- Durable plastic core components hold the cell centered in the system, and protect it from potentially harmful impact
- Sturdy aluminum safety base provides stable foundation on benchtop with smallest footprint in the industry



### **POINT OF APPLICATION**



ITS-90 Standard Platinum Resistance Thermometer (SPRT)
Interpolation Range and Calibration Points