

Gallium cell maintenance apparatus



- One week plateau duration
- No hassle automatic realizations
- Used daily in our Primary Lab

The gallium melting point (29.7646 °C) is a critical temperature. Thermometers used in life science, environmental monitoring, and many other applications depend on it for accurate calibrations. Lab standards rely on it as an ITS-90 check standard and as a means of measuring drift between calibrations. Hart Scientific now makes it easy to use.

The new 9230 Gallium Maintenance System works with Hart's Model 5943 Stainless Steel Gallium Cell to provide melting plateaus that last a week, with results approaching what can be achieved in a Hart maintenance bath. Not a day. Not a day-and-a-half. One week.

The Model 5943 Stainless Steel Gallium Cell holds a gallium sample that is 99.99999+ % pure. The gallium is sealed in a Teflon envelope in a high purity argon atmosphere, which is itself sealed inside a stainless steel housing. This double-sealing method reduces leaching into the gallium sample and ensures a life of ten years or longer for the cell.

Specifications

Temperature Range	15 °C to 35 °C
Ambient Operating Range	18 °C to 28 °C
Stability	± 0.02 °C
Vertical Gradient	< 0.03 °C over six inches during cell maintenance
Plateau Duration	Five days, typical
Resolution	0.01 ° (0.001 ° in program mode)
Display Scale	°C or °F, switchable
Immersion Depth	220 mm (8.75 in) in gallium cell
Stabilization Time	Preprogrammed
Preheat Wells	2
Fault Protection	Heating/cooling rate cutout
Display Accuracy	± 0.05 °C at 29.76 °C
Comparison Block	Contact Hart
Well-to-Well Gradient (in comparison block)	n/a
Heating Time	Preprogrammed
Cooling Time	Preprogrammed
Comm.	RS-232 included
Power Requirements	115 V ac (± 10 %), 60 Hz, 1.0 A, or 230 V ac (± 10 %), 50 Hz, 0.65 A, 175 W
Exterior Dimensions (HxWxD)	489 x 222 x 260 mm (19.25 x 8.75 x 10.25 in)
Weight	8.2 kg (18 lb) without cell

Ordering Information

9230	Gallium Cell Maintenance Apparatus
5943	Stainless Steel Gallium Cell
1904-Ga	Accredited Cell Intercomparison