



reference temperature all day long with stability of $\pm 0.001^{\circ}\text{C}$. Once you finish using the cell, just set the freeze temperature and within minutes the cell is again ready for another realization. What could be easier?

Specifications

Nominal Temperature Values	Water: 0.01°C
	Gallium: 29.7646°C
	Indium: 156.5985°C
Expanded Uncertainty (k=2)	Water: ± 1.0 mK (0.5 typical)
	Gallium: ± 1.0 mK (0.5 typical)
	Indium: ± 2.0 mK (1.0 typical)
Metal Sample Purity	Gallium: 99.99999%
	Indium: 99.9999%
Immersion Depth (in pure sample)	Water: 3.4" (86.4 mm)
	Gallium: 3.0" (76.2 mm)
	Indium: 3.0" (76.2 mm)
Casing Material	Stainless Steel
Well I.D.	0.25" (6.35 mm)
Cell Size	5" H x 1" Dia. (127 x 24 mm)

X Cells

Models 5931–5934

Stainless steel casings help protect cells from mishandling

Accuracies virtually identical to traditional-size quartz cells

Can be maintained in fluid baths or dry-well calibrators

Ordering Information

5931	X Cell, Water Triple Point
5933	X Cell, Gallium
5934	X Cell, Indium
2025	X Cell Basket, Standard Bath Fill Hole
2025-6102	X Cell Basket, 6102 or 7102
2025-7103	X Cell Basket, 7103
3103-5	X Cell Sleeve, 9103

Have you wanted to use fixed-point cells but couldn't justify the price? Have you been hesitant because of complex realization procedures or the fragile nature of traditional cells?

Hart's new X Cells solve all these problems. They provide primary standards performance, are nearly unbreakable, and cost much less than traditional cell systems. The value of the water triple point X Cells is within 0.2 mK of traditional water triple point cells, and the gallium and indium cells include realized uncertainties less than 0.002°C .

Gallium and indium X Cells are constructed using a Teflon crucible containing a sample with purity of at least 99.9999%. The crucible is enclosed within a specially cleaned stainless steel envelope, which is evacuated and back-filled with high-purity argon.

Realizing these reference points couldn't be easier. Special X Cell main-

tenance baskets allow the cells to be used in both standard baths and Micro-Baths, and a special sleeve is available for maintaining X Cells in Model 9103 dry-well calibrators.

Simply place the cell in the heat source, select the melt temperature, and within 30 minutes you'll have an ITS-90

