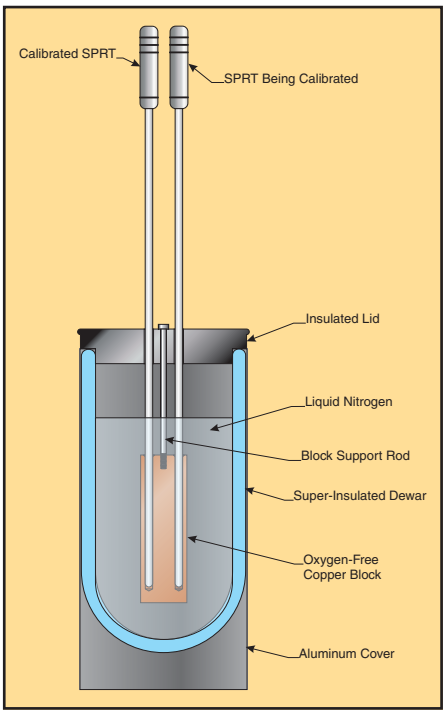
LN_2 comparison calibrators

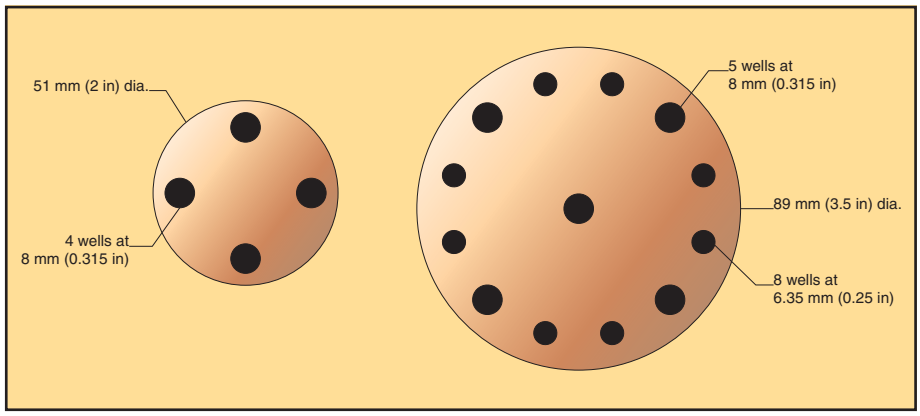


- Low-cost calibrations to –196 °C
- Simple to use
- Uncertainty less than 2 mK

While there is a difference between the nominal boiling point of nitrogen (–196 °C) and the argon triple point (–189.3442 °C), the difference can be corrected for mathematically, and an uncertainty of less than 2 mK from the actual argon triple point is achievable.

Hart's LN_2 Comparison Calibrators consist of a super-insulated glass dewar, a high-purity copper block, and a precision-fit lid. The dewar is filled with LN_2 and the copper block is suspended in it; an SPRT is inserted into the block and a calibration is performed against your own calibrated SPRT. The Model 7196-4 includes four 8 mm (0.315 in) wells. The 7196-13 includes five 8 mm (0.315 in) wells and eight 6.35 mm (0.25 in) wells.

Hart's LN_2 Comparison Calibrators are neither expensive nor complicated to use. If you need supporting data or would like to discuss the theory of operating an LN_2 Comparison Calibrator, call Hart Scientific today. (Or come to one of our training courses, and we'll show you.)



Specifications

Temperature	Nominal –196 °C depending on atmospheric pressure
Thermal Wells	**7196-4**: four 8 mm (0.32 in) I.D. wells **7196-13**: five 8 mm (0.32 in) I.D. wells, eight 6.35 mm (0.25 in) I.D. wells **Both blocks:** 275 mm immersion from top of lid to bottom of well, 150 mm immersion into copper block
Dimensions	180 mm O.D. x 385 mm high
Stability	Typically better than 2 mK/20 min
Uniformity	< 0.4 mK between holes
Volume	3.5 liters of liquid nitrogen
Evaporation	Approx. 25 mm (1 in) per 45 minutes

Ordering Information

7196-4	LN_2 Comparison Calibrator, 4 holes
7196-13	LN_2 Comparison Calibrator, 13 holes