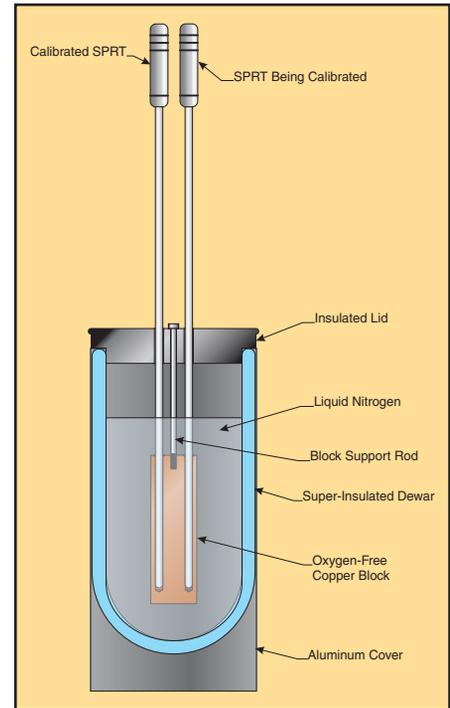


# LN<sub>2</sub> comparison calibrators



- 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> Comparison Calibrator, call Hart Scientific today. (Or come to one of our training courses, and we'll show you.)

## Specifications

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

## Ordering Information

- 7196-4** LN<sub>2</sub> Comparison Calibrator, 4 holes
- 7196-13** LN<sub>2</sub> Comparison Calibrator, 13 holes

