

The Lake Shore PT-100 Series platinum resistance temperature sensors incorporate remarkably uniform sensing elements that exhibit precise, monotonic temperatures in the range from 14 K to 480 K. Temperature characteristics are extremely stable and predictable, and exhibit excellent uniformity from device to device. It is this platinum resistance temperature feature that makes the use of SoftCal™ possible. Through the use of a two-point or three-point SoftCal calibration procedure, the absolute accuracy of the sensor can be significantly improved.

The two-point SoftCal calibrations are made at liquid nitrogen temperature (77.35 K) and 305 K. The resultant accuracy for the PT-100 Series temperature sensors will be  $\pm 250$  mK from 70 K to 325 K.

The three-point SoftCal calibrations are made at liquid nitrogen temperature (77.35 K), 305 K, and 475 K. The resultant accuracy for the PT-100 Series temperature sensors will be  $\pm 250$  mK from 70 K to 480 K.

The actual data points are included in **boldface** type in the accompanying SoftCal Calibration Table.