

Platinum Resistance Thermometer Specification

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Abstract

Examine the specifications of a temperature sensor and little performance related criteria are offered by which a test may be made to determine whether it is in or out of tolerance. Examine the calibration certificate of a temperature sensor and no indication may be provided to determine how the instrument performed over the calibration interval let alone how it might be expected to perform in the future. Combine this with a trend towards less experienced users attempting to make higher precision measurements and trouble is inevitable. Users require industry accepted testable performance criteria for temperature sensors which allow them to make reasoned judgments regarding equipment purchases for their application based on the most relevant parameters that can be specified. Finally, once a user has selected the appropriate measurement instrument for their application they need the ability to match an instrument with its appropriate calibration. This paper discusses the problem of temperature sensor specifications, how the industry might address them and how this relates to calibration requirements, reports of calibration and tolerance status.