# 2182A Nanovoltmeter



# **Applications**

### • Research

- o Determining the transition temperature of superconductive materials
- o I-V characterization of a material at a specific temperature
- o Calorimetry
- Differential thermometry
- o Superconductivity
- o Nanomaterials
- Metrology
  - o Intercomparisons of standard cells
  - o Null meter for resistance bridge measurements

#### Nanotechnology Application

- o Carbon Nanotube Resistance Measurements
- o Silicon Nanowires

## Benefits

- Make low noise measurements at high speeds
- Delta mode coordinates measurements with a reversing current source (62xx/2182A)
- Dual channels support measuring voltage, temperature, or the ratio of an unknown resistance to a reference resistor
- Built-in thermocouple linearization and cold junction compensation

## **Allied Products**

• 6221, 6220

## Frequently asked questions

- Which interfaces are available? -GPIB (IEEE-488.2) and RS-232C
- Can I use the 2182A/E for measuring precise low resistance materials or devices? Yes, when creating a Delta Mode system with the 622xx Current Sources.
- Can I measure temperatures? -Yes, thermocouples,CJC,TYPE:J, K, T, E, R, S, B,N

