Which Keithley nanotechnology solution is best for your sourcing or measurement application?

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A Tektronix Company

Keithley instrumentation is being used in a growing list of nanotechnology research and production test settings. The applications shown here are only a sampling of the nanotechnology test and measurement tasks for which our instruments and systems are suitable. If your tests require sourcing or measuring low level signals, Keithley instrumentation can help you perform them more accurately and cost-effectively.

Want low current measurements without the high price tag?

With <200μV burden voltage, the cost-effective **Model 6485 Picoammeter** ensures accurate low current measurements, even in circuits with very low source voltages. The **Model 6487 Picoammeter/Voltage Source** adds a 500V bias source for high resistance and resistivity measurements. The **Model 6482 Dual-Channel Picoammeter/Voltage Source** gives you two channels in one instrument to save rack space.

Trying to characterize high resistance nanomaterials?

The **Model 6517B Electrometer/High Resistance Meter's** built-in 1kV source, 200TΩ input resistance, and low current sensitivity make it an ideal solution.

Want seamless control over current pulse sourcing and measurement?

When linked together, the **Model 6221 AC+DC Current Source** and **Model 2182A Nanovoltmeter** are designed to operate like a single instrument to make high speed pulse mode measurements.

Studying highly resistive nanowires?

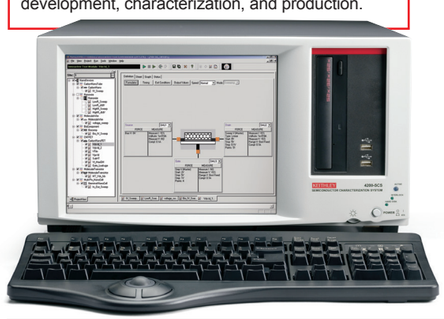
The **Model 6430 Sub-Femtoamp Remote SourceMeter®** instrument's low noise and drift performance make it ideal. It measures currents with 400aA (400×10^{-18}A) sensitivity.

Polymer Nanofibers/ Nanowires | **Semiconductor Nanowires** | **Carbon Nanotubes and Graphene** | **Single Electron Devices/Transistors** | **Carbon Nanotube Field Effect Transistors** | **Nanobatteries** | **Nanophotonics** | **Synthesized Molecular Electronics/Wires** | **Nanosensors & Arrays** | **Thermal Transport**

High R/Low I, 1MΩ to 1014Ω | Low Power, R < 10MΩ, Pulse | Low Power, R < 100kΩ | Low I, Low V | Low I, Pulse | Low I, Low Power | Low I, Pulse | Low I, Low Power | Low I, Low V | Low I, Low Power, Pulse

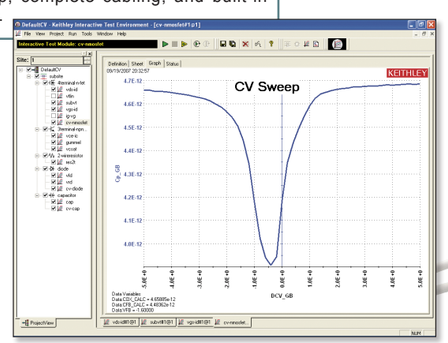
Want multiple channels of sourcing and measurement?

The fully integrated **Model 4200 Semiconductor Characterization System** brings together all three core measurement types, DC-IV, AC impedence and transient I-V, in one easy-to-operate package. It's used in many phases of nano research, development, characterization, and production.



Need to characterize mobility, carrier density, and device speed?

The **Model 4210-CVU Option** takes the guesswork out of obtaining valid capacitance-voltage (C-V) measurements quickly and easily, with intuitive point-and-click setup, complete cabling, and built-in element models.



Troubled by overheating problems?

The **Model 4225-PMU** option for the Model 4200-SCS performs pulsed I-V testing on a variety of devices for many different purposes, including preventing device self-heating by using narrow pulses and/or low duty cycle pulses rather than DC signals.

Testing lots of devices?

Series 2600B System SourceMeter® instruments let you make precision DC, pulse, and low frequency AC source-measure tests quickly, easily, and economically. They offer virtually unlimited flexibility to scale the system's channel count up or down to match changing application needs.

Looking for just a single channel?

Each **Series 2400 SourceMeter instrument** is a complete, single-channel DC parametric tester. Choose from a variety of ranges and functions to suit specific application needs. The Model 2430 can be programmed to produce individual pulses or pulse trains up to 5ms wide.

TEST OF TIME
Test & Measurement World