# KEITHLEY PRODUCTS

Continue to Innovate with These Complementary Products



Tektronix<sup>®</sup>

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### **POWER SUPPLIES**

#### IF YOU ARE...

- Powering new components, circuits, and devices for design or automated tests
- Performing breakdown tests on high power transistors
- Powering and testing low power, portable, battery-operated products such as IoT devices, medical products, mobile phones, tablets, and remote industrial sensors. . .

#### WE CAN HELP...

We can help you with your power sourcing requirements. Keithley has DC power supplies with a wide range of voltage, current, and power outputs:

- Single- and multiple-output power supplies for education, research, design, and automated testing
- Power levels up to 1080 W with voltages up to 10 kV and currents up to 108 A
- Specialized battery-simulating power supplies
- Supplies equipped with extensive features, including current measurement with nanoamp resolution, variable rise/fall times, analog inputs, digital I/O, and programmable interfaces

#### **UPGRADE TO THESE HIGH-PERFORMANCE POWER SUPPLIES:**



### Series 2280 Precision Measurement DC Power Supplies

- 192 W with up to 6 A
- 6½-digit, 10 nA current measurement resolution
- · Displays plots of voltage and current



### Series 2220/2230/2231 Multiple Output DC Power Supplies

- Two or three independent outputs
- All outputs displayed simultaneously
- Remote sensing on all channels



### Series 2281 Dynamic Model Battery Simulator

- Model any type of battery
- Unique display shows battery state
- Precision power supply mode



# Series 2200 USB/GPIB DC Power Supplies

- 20 V to 72 V and 1.2 A to 5 A outputs
- 1 mV/0.1 mA resolution
- Displays settings and outputs



### Series 2260B 360/720/1080 W DC Power Supplies

- Power up to 1080 W
- Outputs up to 800 V and 100 A
- Analog input



# Series 2300 Battery Simulating DC Power Supplies

- Single and Dual output modes
- Each output can source or sink
- Programmable output resistance



# Series PWS4000 USB DC Power Supplies

- 20 V to 72 V and 1.2 A to 5 A outputs
- 1 mV/0.1 mA resolution
- Displays settings and outputs



### Series 2290 High Voltage DC Power Supplies

- 5 kV and 10 kV outputs
- 1  $\mu A$  current resolution
- · Safety interlock



### Series PWS2000 DC Power Supplies

- Up to 192 W
- Most economical
- Memory for up to 20 setups

### **DIGITAL MULTIMETERS**

Keithley and Tektronix offer the widest range of bench, system, and multichannel digital multimeters (DMMs) to meet any measurement requirement. So whether you need a basic DMM for a lab, a fast and accurate DMM for component, module or assembled product, production testing, or a multi-channel measurement system for environmental test, we can help you with our extensive portfolio of these instruments. Select a DMM or a multi-channel datalogging DMM that will meet all your needs for today and tomorrow.

#### **HIGH PERFORMANCE DMMS**



### **NEW DMM6500**

- 5 in (12.7 cm) touchscreen display
- 100 nV, 1  $\mu\Omega$ , 10 pA, and 0.1 pF sensitivity
- 1 Msample/s digitizer



### Model 2000 6½-Digit Multimeter with Scanning

- 0.003% DCV accuracy (one year)
- Multiplexer card options
- 13 built-in measurement functions



# DMM7510 7½-Digit Graphical Sampling Multimeter

- 0.0014% DCV accuracy (one year)
- 1,000,000 readings/s digitizer
- Touchscreen display



#### Model 2015 THD and Audio Analysis Multimeter

- THD, THD+noise, and SINAD
- 20 Hz-20 kHz sine wave generator
- Fast frequency sweeps optimized for production test



### Model 2010 7½-Digit Multimeter with Scanning

- 100 nV noise floor
- Dry circuit measurement
- 10 Ω resistance range



# Model 2002 8½-Digit Multimeter with Scanning

- 0.0006% DCV accuracy (one year)
- 1 nV, 100 m $\Omega$ , and 10 pA sensitivity
- DC in-circuit current and 15 MHz frequency measurement



### Model 2001 7½-Digit Multimeter with Scanning

- 0.0018% DCV accuracy (one year)
- Peak detection of 1 µs spikes
- 2 MHz ACV bandwidth

### **DIGITAL MULTIMETERS**

#### BASIC PERFORMANCE 51/2- AND 61/2-DIGIT DMMS



### Model 2100 6½-Digit USB Multimeter

- 11 functions, 8 math operations
- USB interface
- Front and rear inputs



### Series 4000 5½- and 6½-Digit Multimeters

- 0.0024% DCV accuracy (one year)
- Temperature and capacitance
- CAT I 1000 V, CAT II 600 V ratings



#### Model 2110 5½-Digit Dual-Display USB Multimeter

- Temperature and capacitance
- 10 A DC and AC current ranges
- USB or USB/GPIB option

### MULTI-CHANNEL MEASUREMENT DMMS WITH CAPACITY UP TO 80 OR 576 CHANNELS



### **NEW DAQ6510**

- 5 in (12.7 cm) touchscreen display
- 6½-digit DMM with 0.0025% DCV basic accuracy
- 12 plug-in modules and 80 channel capacity



### Series 3700 System Switch/Multimeter

- 7½-digit multimeter
- High density switching with 576 two-wire multiplexer channels
- Six-card mainframe



### Model 2700 Multimeter/Data Acquisition/Switch System

- 6½-digit multimeter
- 80-channel, two-wire multiplexer capacity
- Two-card slot mainframe

### SOURCE MEASURE UNIT (SMU) INSTRUMENTS

Have you heard of a source measure unit (SMU) instrument? A SMU instrument is an advanced power supply that makes highly sensitive measurements. It integrates the capabilities of a bipolar, precision voltage source, a DC digital multimeter (DMM) with highly sensitive current measurement, a bipolar current source, and an electronic load into a single, tightly synchronized bench and system instrument.

Keithley offers the broadest choice of SMU instruments available. All Keithley SourceMeter® instruments are fully programmable while delivering

higher precision, sensitivity, and flexibility ideal for materials research and for testing semiconductor devices (nano-scale transistors, bipolar junction and MOSFET transistors, diodes, wide bandgap power semiconductors, LEDs, and laser diodes), low power components and more.

If you need to characterize components or devices and you need low current measurements at microamps or below, then you need to consider an SMU.

#### **CHOOSE FROM THESE MODELS TODAY:**



# Series 2400 SMUs: New Touchscreen UI

- Source up to 10 pA pulse, 200 V, 1000 W
- Measure down to 10 fA, 100 nV
- Low price options (non-touchscreen)



### Series 2600B SMUs: Ideal for Production

- High speed embedded programming
- Single or dual channel options
- Source up to 10 pA pulse, 200 V, 200 W
- Measure down to 0.1 fA, 100 nV



#### Model 2520 SMU for Laser Diode Test

- Integrated pulsed LIV system
- Dual channel photodiode mount
- Optional integrating sphere



#### 2650 Series SMUs for High Power

- Source up to 50 A pulse, 3000 V, 2000 W
- Measure down to 1 fA, 1 µV
- · Connect two for a 100 A current source
- 1 µs, 18-bit sample rate

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