

6220 / 6221 Current Sources

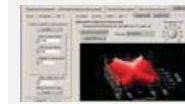


30-SECOND SELL

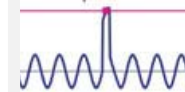
“The Models 6220 DC and 6221 AC/DC current sources combine ease of use with exceptionally low current noise. Device testing and characterization of today’s very small and power-efficient electronics requires sourcing low current levels, which demands the use of a precision low current source.”

PRODUCT HIGHLIGHTS

- $10^{14}\Omega$ output impedance ensures stable current sourcing into variable loads
- 64k-point source memory for comprehensive test current sweeps
- (Model 6221) Source AC currents from 4pA to 210mA peak to peak for AC characterization of components and materials. The 10MHz output update rate generates smooth sine waves up to 100kHz



Perform, analyze, and display differential conductance measurements.



Measurements are line synchronized to minimize 50/60Hz interference.

MODEL	STOCK CODE	CURRENT SOURCE	ARBITRARY WAVEFORM GENERATOR	PULSE GENERATOR	RESISTANCE	PC INTERFACE
6220	2131306	$\pm 100\text{fA} - 100\text{mA}$	—	—	—	GPIB, RS-232
6221	2074759	$\pm 100\text{fA} - 100\text{mA}$	1mHz – 100kHz, 10Msamples/s sample rate, 64k point waveform length	Programmable, 5 μs minimum width	—	GPIB, RS-232, Ethernet
6220/2182A	2131305	$\pm 100\text{fA} - 100\text{mA}$	—	—	10n Ω – 1G Ω	GPIB, RS-232
6221/2182A	2074761	$\pm 100\text{fA} - 100\text{mA}$	1mHz – 100kHz, 10Msamples/s sample rate, 64k point waveform length	Programmable, 50 μs minimum width, for pulsed I-V measurements	10n Ω – 1G Ω	GPIB, RS-232, Ethernet

*Delta Mode Resistance Measurement System

6220 / 6221 Current Sources

RECOMMENDED ACCESSORIES

237-ALG-2	Low Noise Triax Cable, 3-slot triax to alligator clips	NIC
7007-1	Shielded GPIB Cable, 1m (3.2 ft)	2131242
7007-2	Shielded GPIB Cable, 2m (6.5 ft)	2131243
7007-4	Shielded IEEE-488 Cable, 4m (13.1 ft)	NIC
7009-5	Shielded RS-232 Cable, 1.5m (5 ft)	NIC
7078-TRX-3	Low Noise Triax Cable, 3-Slot Triax Connectors, 0.9m (3 ft)	2077465
7078-TRX-5	Low Noise Triax Cable, 3-Slot Triax Connectors, 1.5m (5 ft)	2077466
7078-TRX-10	Low Noise Triax Cable, 3-Slot Triax Connectors, 3m (10 ft)	2077467
7078-TRX-20	Low Noise Triax Cable, 3-Slot Triax Connectors, 6m (20 ft)	NIC
8501-1	Trigger Link Cable with male Micro-DIN connectors at each end, 1m (3.3 ft)	2131252
4288-1	Single Fixed Rack Mounting Kit	2131276
4288-2	Dual Fixed Rack Mounting Kit	2131277
KPCI-488LPA	IEEE-488 Interface/Controller for the PCI Bus	2077470
KUSB-488B	IEEE-488 USB-to-GPIB Interface Adapter	2077471

SHIPS WITH PRODUCT

- 6.6 ft (2m), Low Noise, Input Cable with Triax-to-Alligator Clips
- 6.6 ft (2m) Trigger Link Cable to connect 622x to 2182A
- Ethernet Crossover Cable (6221 only)
- Communication Cable between 2182A and 622x
- Safety Interlock Connector
- Instruction manual on CD
- Getting Started manual (hardcopy)
- Software (downloadable)


ANOTHER PRODUCT FOR CONSIDERATION



Also consider the **Model 2182A Nanovoltmeter**. When combined with the 6220/6221 sources, it's possible to create a powerful low power, low resistance measurement system.

See page 92

TOOLS FOR THE CUSTOMER

 Data Sheet

FOR MORE INFO VISIT
TEK.COM/PRODUCT-SERIES/ULTRA-SENSITIVE-CURRENT-SOURCES-SERIES-6200

3 Reasons to Buy this Product

- 1 Either Model 6220 or 6221 provides better accuracy, consistency, reliability, and robustness than “home-made” solutions. Both current sources support linear, logarithmic, and custom sweeps. The 6221 also supports megahertz update rates for emulating high-fidelity current signals or complex waveforms.
- 2 Both models have a DMM-like front panel that reduces user learning curves and time to address an application. Both are fully programmable via the front panel controls or from an external controller via RS-232 or GPIB interfaces.
- 3 Keithley is the trusted name for low current sourcing.