

# Keysight B2901A/02A/11A/12A Precision Source/Measure Unit (SMU)

1 ch/2 ch, 210 V, 3 A DC/10.5 A Pulse, 10 fA/100 nV Resolution



A revolutionary source/measure solution with easy-to-use GUI

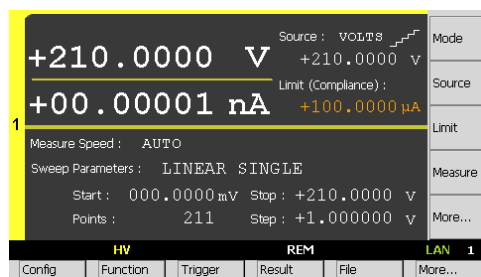
- Innovative GUI: I-V (current - voltage) measurement without PC programming
- High sourcing & measurement resolution: 10 fA/100 nV
- Wide application coverage: 210 V, 3 A DC/10.5 A pulsed
- Minimum digitizing interval: 10 µsec
- Multiple software control options, allowing you to choose the solution that best fits your particular application

Multiple software control options also available. For more details, see 5992-1214EN

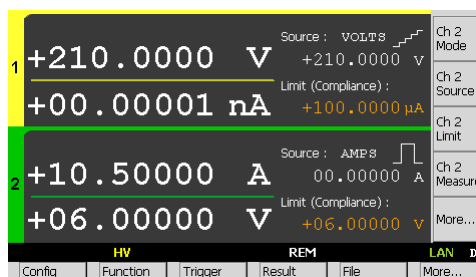


## Typical applications

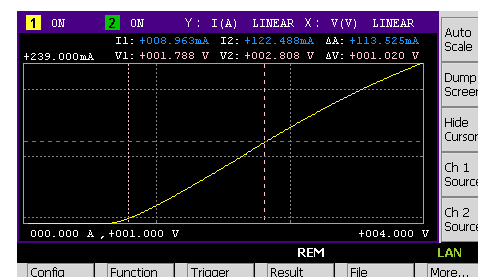
- Optical devices (laser diodes, photo diodes)
- Organic devices (OLEDs)
- Photovoltaic (solar) cells
- Nano-technology materials
- Power management devices (LDOs)
- Semiconductor devices (FETs, transistors)
- Resistors, diodes, varistors, and other component devices



Easy setting for I-V sweep measurement on a GUI



Easy operation for basic setting and measurement



Easy viewing of I-V curve on a GUI

Learn more at: [www.keysight.com](http://www.keysight.com)

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## Key specifications and characteristics

Model	No. of channel	Max output		Source			Measurement			Minimum digitizing interval
		V	I	Max digits	Min. resolution		Max digits	Min. resolution		
					V	I		V	I	
B2901A	1	210 V	3.03 A (DC) 10.5 A (Pulsed)	5½	1 µV	1 pA	6½	100 nV	100 fA	20 µsec
B2902A	2			6½	100 nV	10 fA	6½	100 nV	10 fA	10 µsec
B2911A	1			6½	100 nV	10 fA	6½	100 nV	10 fA	10 µsec
B2912A	2			6½	100 nV	10 fA	6½	100 nV	10 fA	10 µsec

## Options and accessories

Model	Option	Description
B2901A B2902A B2911A B2912A	A6J	ANSI Z540 compliant calibration
	UK6	Commercial calibration certificate with test data
	ABA	User's Guide, English
	ABJ	User's Guide, Japanese
	AB0	User's Guide, Traditional Chinese
	AB2	User's Guide, Simplified Chinese
N1294A	0B0	Download the Product Manual from the Keysight website
	001	Banana – Triaxial adaptor for 2-wire connection
	002	Banana – Triaxial adaptor for 4-wire connection
	031	GPIO-BNC Trigger adapter
	032	Digital I/O Trigger Cable for Multiple Unit Control
N1295A		Device/component test fixture

## B2900 precision instrument family

The B2900 family contains products that perform both precision sourcing and precision measurement.



[www.keysight.com/find/b2900a](http://www.keysight.com/find/b2900a)

## Software control options

Software control option	Description
BenchVue	Source constant voltage or current and control other Keysight instruments
Graphical Web Interface	Use your web browser to make basic measurements
Quick I/V Measurement Software	A common software solution for the entire B2900 family
EasyEXPERT group+	Powerful software for detailed characterization and analysis of devices, circuits and materials

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