# 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





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Easy setting for I-V sweep measurement on a GUI

# Typical applications Optical devices (laser diodes, photo diodes) Organic devices (OLEDs)

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

• Multiple software control options, allowing you to choose the solution that best fits your particular

• 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

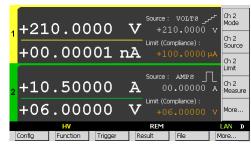
• Photovoltaic (solar) cells

application

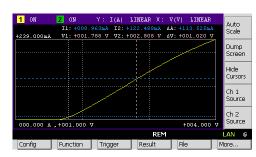
- Nano-technology materials
- Power management devices (LDOs)

• Minimum digitizing interval: 10 µsec

- Semiconductor devices (FETs, transistors)
- Resistors, diodes, varistors, and other component devices



Easy operation for basic setting and measurement



Easy viewing of I-V curve on a GUI

Learn more at: www.keysight.com

#### Key specifications and characteristics

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

#### Options and accessories

| Model            | Option | Description   |
|------------------|--------|---|
|                  | A6J    | ANSI Z540 compliant calibration                       |
|                  | UK6    | Commercial calibration certificate with test data     |
| B2901A           | ABA    | User's Guide, English                                 |
| B2902A           | ABJ    | User's Guide, Japanese                                |
| B2911A<br>B2912A | AB0    | User's Guide, Traditional Chinese                     |
| DZ91ZA           | AB2    | User's Guide, Simplified Chinese                      |
|                  | 0B0    | Download the Product Manual from the Keysight website |
|                  | 001    | Banana – Triaxial adaptor for 2-wire connection       |
| N1294A           | 002    | Banana – Triaxial adaptor for 4-wire connection       |
| N1294A           | 031    | GPIO-BNC Trigger adapter                              |
| •                | 032    | Digital I/O Trigger Cable for Multiple Unit Control   |
| N1295A           |        | Device/component test fixture                         |

#### 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 |  |  |  |  |

#### B2900 precision instrument family

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







www.keysight.com/find/b2900a

Learn more at: www.keysight.com

