

B2900 Precision Instrument Family

Unlock critical precision sourcing and measurement capabilities with the B2900 family



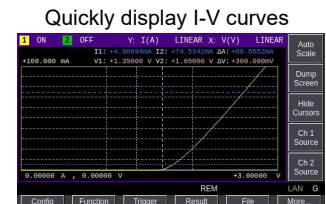
The B2900C/CL and B2960C Series are PathWave BenchVue software enabled.



B2900C/CL Series precision source/measure units

Precision source and measurement capabilities with intuitive GUI

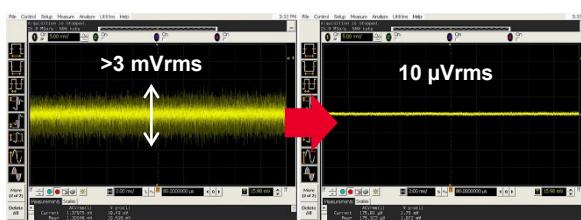
- Direct front panel display of I-V curves and various graph types
- High-precision 6.5-digit sourcing and measurement resolution
- Wide application coverage from 100 nV/10 fA to 210 V/3 A DC and 10.5 A pulse
- Multiple software control options to fit your specific application needs



B2960C Series low noise power sources

High-precision voltage and current sources with noise performance

- 10 μ Vrms ultra-low noise precision source
- Unmatched current and voltage sourcing resolution (6.5-digit, 100 nV/10 fA)
- High-precision ARB capability with 6 built-in waveforms and speeds up to 10 kHz



B2980C Series femto/picoammeters and electrometers

Measure materials and devices with confidence down to 0.01 fA and up to 10 P Ω

- 2 pA range and 0.01 fA resolution for unprecedented performance in high-impedance environments.
- Integrated 1000 V source enabling resistance measurements up to 10 P Ω
- Battery model eliminates AC power line noise
- Graphical time domain and histogram views for quick debugging and analysis



Key Specifications

Model number	B2901CL	B2910CL	B2901C/02C	B2911C/12C	B2961C/62C				B2981C	B2983C	B2985C	B2987C	
Type	Source/Measure Unit				Precision Voltage/Current Source				Femto/Picoammeter	Electrometer			
Number of channels	1	1	1 or 2		1 or 2				1				
Source	Resolution	5.5 digit	5.5 digit	5.5 digit	6.5 digit	6.5 digit				—	(See Note) ²		
	Max. output	Current (DC)	1.5 A	1.5 A	3.03 A ¹	3.03 A ¹	3.03 A	105 mA	500 mA	—	—		
		Voltage	21 V	210 V	210 V	210 V	210 V	42 V	21 V	—	1000 V		
	Min. resolution	Current	10 pA	100 fA	1 pA	10 fA	10 fA	10 pA	1 nA	—	—		
		Voltage	1 μ V	1 μ V	1 μ V	100 nV	100 nV	—	—	—	700 μ V		
	Voltage output noise		3 mVrms	3 mVrms	3 mVrms	3 mVrms	350 μ Vrms	10 μ Vrms	10 μ Vrms	—	1.6 mVrms		
	Resolution	6.5 digit	6.5 digit	6.5 digit	6.5 digit	4.5 digit				6.5 digit			
	Max.	Current (DC)	1.5 A	1.5 A	3.03 A ¹	3.03 A ¹	3.03 A	105 mA	500 mA	20 mA			
		Voltage	21 V	210 V	210 V	210 V	210 V	42 V	21 V	—	20 V		
		Resistance	—	—	—	—	—	—	—	—	10 P Ω		
		Charge	—	—	—	—	—	—	—	—	2 μ C		
Measurement	Min. resolution	Current	1 pA	10 fA	100 fA	10 fA	1 pA	1 nA	1 nA	100 nA	0.01 fA		
		Voltage	100 nV	100 nV	100 nV	100 nV	100 nV	—	—	—	—	1 μ V	
		Resistance	—	—	—	—	—	—	—	—	—	1 Ω	
		Charge	—	—	—	—	—	—	—	—	—	1 fC	
	DC sweep functions			Linear/log single, linear/log double, list				Linear/log single, linear/log double, list				Linear single/double, list	
ARB functions			—				Sinusoid, square, trapezoid, ramp, triangle, exponential, user defined				—		
Battery operation			—				—				—	Yes	
Software control options	PathWave BenchVue	Yes				Yes				—			
	Graphical Web Interface	Yes				Yes				Yes			
	Pathwave IV Curve Software	Yes				Yes				—			
	EasyEXPERT group+	Yes				—				—			

1. 10.5 A(pulse)

2. 700 μ V resolution for 20V, 35 mV resolution for 1000V range.

Refer to Keysight.com website for product details, technical overviews and other information.

Please visit at www.keysight.com/find/B2900

Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at www.keysight.com.

This information is subject to change without notice. © Keysight Technologies, 2025,
Published in USA, June 1, 2025, 3125-1141.EN