Why Upgrade to B2900C/CL Series Precision Source/Measure Unit

Benefits of the B2900C Series Over the B2900A/B Series

Since 2011, the B2900 series has enhanced testing capabilities and efficiency across various applications, including semiconductor evaluations, from the lab to manufacturing. The new B2900C/CL series, launched in June 2025 incorporates updated features.

Increased current capacity

The C model removes the maximum current limitation on the A/B models when using two channels, allowing for a broader range of current evaluations.

Expanded application coverage

The C model supports the PW9253A "PathWave Advanced Battery Test and Emulation" software, addressing the battery testing and emulation applications.

Maintaining the latest technologies and support

The C model is fully supported with the latest and future software versions.

The A model will be the end support in 2027, limiting service and support.

Upgrading to the C model ensures you continue receiving the latest firmware updates and the premium service and support.

More information: www.keysight.com/find/B2900C



Figure 1. Introducing the new B2900C/CL Series



Figure 2. PW9253A PathWave Advanced Battery Test and Emulation



Specification Comparison: A/B Model vs C Model

		B2901		B2910		B2901		B2911		B2902		B2912	
Performance specifications		BL	CL	BL	CL	A/B	С	A/B	С	A/B	С	A/B	С
Number of channels per module		1		1				1				2	
Max. Output	Voltage	21 V		210 V		210 V			210 V				
	Current (DC)	1.5 A		1.5 A		3 A				3 A			
	Current (Pulsed)	N/A		N/A		10.5 A				10.5 A			
	Total current limitation	N/A		N/A				N/A		Limited*1	No limit*1	Limited*1	No Limit*1
Source resolution	Current	10 pA		100 fA		1 pA		10 fA		1 pA		10 fA	
	Voltage	1 μV		1 μV		1 μV		100 nV		1 μV		100 nV	
Measurement	Current	1 pA		10 fA		100 fA		10 fA		100 fA		10 fA	
Resolution	Voltage	100 nV		100 nA		100 nV		100 nV		100 nV		100 nV	
Min. Pulse width		N/A		N/A		50 μs			50 μs				
Max. Sampling rate		5 kSa/s		20 kSa/s		50 kSa/s		100 kSa/s		50 kSa/s		100 kSa/s	
Software	EasyEXPERT group+	~* 2	✓ *3	✓* 2	✓ *3	✓* 2	✓ *3	✓* 2	✓ *3	~ *2	✓ *3	~ *2	✓ *3
	PW9251A IV Curve Measurement	✓* 2	✓	~* 2	~	✓* 2	✓	~* 2	~	√* 2	~	~* 2	~
	PW9253A Battery Test	No	~	No	✓	No	✓	No	~	No	~	No	~
	PathWave BenchVue	~ *2	~	√ *2	~	✓ *2	~	√ *2	✓	✓ *2	~	√ *2	~

*1. In the B2902/12A and B models, channels 1 and 2 couldn't both output full current between 6 V and 21 V (inside the red box of Figure 3). The B2902/12C removes this limit, so both can run at maximum current together.

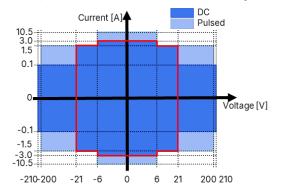
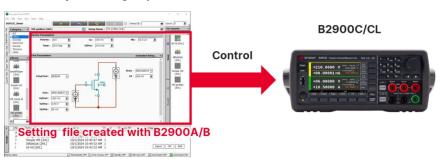


Figure 3. IV range of B2900A/B/C Series

- *2. No guarantee of future support after the discontinuation.
- *3 Files created with A/B models can be loaded and reused in C model.

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