## PathWave BenchVue Software

Control. Automate. Simplify.

# Simplified Measurement Viewing, Control and Capture

Keysight's PathWave BenchVue software for the PC eliminates many of the issues around bench testing. By making it simple to connect, control instruments, and automate test sequences you can quickly move past the test development phase and access results faster than ever before. Dedicated instrument apps allow you to quickly configure the most used measurements and setups for each instrument family. With the Test Flow enabled apps help you drastically shorten your development of automated programs and further streamline your workflow.





Ihr Ansprechpartner / Your Partner:

dataTec AG E-Mail: info@datatec.eu >>> www.datatec.eu





Mess- und Prüftechnik. Die Experten.

Use PathWave BenchVue Apps to:

- · Configure the most commonly used controls and measurements from instruments
- Visualize multiple measurements simultaneously
- Easily log and export data and images in a few clicks for faster analysis
- Quickly create automated test sequences with minimal instrument knowledge
- Access deeper instrument controls and solutions

Save time by:

- Analyzing results within BenchVue or with built-in data exports
- Learning software quickly with common look and feel apps
- Utilizing multiple instrument apps in one easy to use software platform

## **Plug and Play Instrument Control**

Connecting and controlling an instrument to BenchVue is as simple as plugging it in and launching the BenchVue instrument application. No programming or separate instrument drivers required. BenchVue will automatically detect GPIB, USB and LAN instrument connections.





## **BenchVue Apps**

Keysight's BenchVue software platform provides access to a wide array of instrument control, automation and analysis apps with different capabilities to enhance your productivity. These capabilities vary based on the functionality of the types of instruments, apps, and models that are connected to your PC running BenchVue software.

All instrument control apps such as BenchVue Fieldfox Handheld Analyzer apps allow you to easily control and build custom automated sequences using BenchVue Test Flow.

Technology-specific apps such as Solar Array Simulation software are dedicated apps for a specialized type of application or industry.

Lab management apps provide centralized lab instrument configuration, ability to track assets, and more lab administration features.



**Important note:** Keysight's BenchVue software apps are always ensured to provide the best user experience and functionality to enhance your productivity. The new Pathwave BenchVue Digital Multimeter, BenchVue Function Generator, BenchVue Power Supply and BenchVue Oscilloscope apps will run as a standalone application and supports all new and some existing<sup>1</sup> instrument models.



BenchVue Digital Multimeter



BenchVue Power Supply



BenchVue Function Generator



BenchVue Oscilloscope

Note: All orders today come with license for both version

<sup>&</sup>lt;sup>1</sup> For the most current supported instrument list, visit: www.keysight.com/find/BenchVueInstruments.



### **BenchVue apps and collections**

- Complete Control Collection (BV9001B)
- Digital Multimeter (BV0001B)
- Function Generator (BV0002B)
- Power Supply (BV0003B)
- Oscilloscope (BV0004B)
- Data Acquisition (BV0006B)
- Power Meter (BV0007B)
- FieldFox Analyzer (BV0010B)
- Universal Counter (BV0011B)
- Electronic Load (BV0012B)
- Current Analyzer (BV0013B)
- LCR Meter (BV0014B)
- USB Modular Digital Multimeter App (BV0021B)
- USB Modular Function Generator App (BV0022B)
- USB Modular SMU App (BV0023B)
- USB Modular Oscilloscope App (BV0024B)
- USB Modular DAQ App (BV0025B)

- USB Modular Data Acquisition (BV0025B)
- AC Source Control Software (BV0026B)
   NEW
- AC Source Avionics Standard Test Software (BV0028B) NEW
- AC Source Pre-Compliance Test Software (BV0030B) NEW
- Spectrum Analyzer (available in BV9001B)
- Network Analyzer (available in BV9001B)
- Signal Generator (available in BV9001B)
- Solar Array Simulation (DG8901A)
- IV Curve Measurement Software (PW9251A) NEW
- Advanced Power Control & Analysis Software (PW9252A) NEW
- Advanced Battery Test & Emulation (PW9253A) NEW
- Advanced Power Application Suite (PW9254A) NEW
- USB Modular Chassis (Free)
- USB Modular Switch Matrix (Free)
- Power Analyzer (Free)
- Serial Control Beta (Free)

For the latest applications with free 30-day trials, check out the BenchVue Apps tab within BenchVue or visit: www.keysight.com/find/benchvue\_apps

**Note:** We have fully transitioned the BenchVue Included license that comes with your instrument purchase to the BenchVue Basic App, making it easier for you to access and use BenchVue software. You can now download PathWave BenchVue Basic for free. PathWave BenchVue Basic apps provide unlimited access and features available in the version just before the latest version of BenchVue software.

Visit: www.keysight.com/find/BVBasic for more information



## **BenchVue Complete Control Collection**

Access a complete collection of all BenchVue instrument control, automation and analysis apps. Including exclusive access to the Network Analyzer, Spectrum Analyzer and Signal Generator apps.

### Model: BV9001B



- Digital Multimeter app
- Function Generator app
- Power Supply app
- Oscilloscopes app
- Data Acquisition app
- Power Meters/Sensors app
- FieldFox App
- Universal Counter app
- Electronic Load app
- Current Analyzer app

- LCR Meter app
- USB Digital Multimeter app
- USB Function Generator app
- USB Modular SMU app
- USB Modular Oscilloscopes app
- USB Modular Data Acquisition app
- Spectrum Analyzer app
- Signal Generator app
- Network Analyzer app



## **BenchVue Digital Multimeter Control App**



#### Model: BV0001B

Easily control your DMM and acquire log measurements for quick analysis.

- All new standalone application
- High resolution with newly designed user-friendly Interface

- 34401A, 34405A, 34410A, 34411A, 34420A, 34450A, 34460A, 34461A, 34465A, 34470A,
- EDU34450A



## **BenchVue Function Generator Control App**

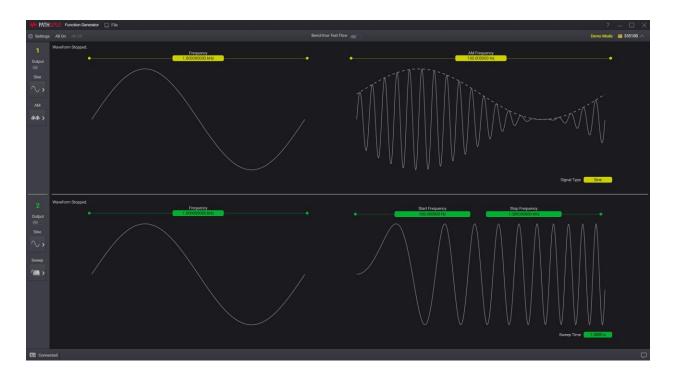


#### Model: BV0002B

Intuitively control your function generators and design custom waveforms.

- All new standalone application
- High resolution with newly designed user-friendly Interface

- 33611A, 33612A, 33621A, 33622A
- 33210A, 33220A, 81150A, 81160A
- 33509B, 33510B, 33511B, 33512B, 33519B, 33520B, 33521B, 33522B
- EDU33211A, EDU33212A





## **BenchVue Power Supply Control App**



### Model: BV0003B

Easily control your power supplies to set parameters.

- All new standalone application
- High resolution with newly designed user-friendly Interface

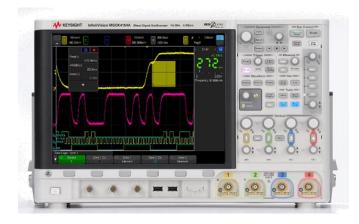
- B29xxA Series (4)
- B2961A/62A
- E3600 Series (14)
- E36100 Series (10)
- E36200 Series (4)
- E36300 Series (3)
- N5700 Series (24)
- N6700A/B/C, N6701A/C, N6702A/C, N6705A/B/C
- N6785A, N6786A
- N6900 Series (12)
- N7900 Series (12)
- N8700 Series (21)
- N8900 Series (36)
- RP7900 Series (6)
- B29xxB (7)
- B2901BL, B2910BL
- N67xxA (21)
- N67xxB (12)
- RP7972A, RP7973A
- RP7982A, RP7983A, RP7984A
- E36154A, E36155A
- EDU36311A, PZ2100A



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## **BenchVue Oscilloscope Control App**



### Model: BV0004B

Conveniently control your oscilloscopes and quickly acquire log data for analysis.

- All new standalone application
- High resolution with newly designed user-friendly Interface

- 1000-X Series (10)
- 2000-X Series (12)
- 3000-X Series (18)
- 3000T Series (19)
- 4000-X Series (16)
- 6000 Series (8)
- 7000 Series (14)
- 9000 Series (8)
- 90000 Series (6)
- 90000 X-Series (17)
- 90000 DSA Series (16)
- P924xA Series (3)
- S Series (14)
- V Series (18)
- Z Series (10)
- MSO-X 3012G, MSO-X 3014G, MSO-X 3022G, MSO-X 3024G, MSO-X 3032G, MSO-X 3034G, MSO-X 3052G, MSO-X 3054G, MSO-X 3102G, MSO-X 3104G
- MSOX4052G, MSOX4054G, EXR404A, EXR408A, EXR604A, EXR608A
- DSO-X 3012G, DSO-X 3014G, DSO-X 3022G, DSO-X 3024G, DSO-X 3032G, DSO-X 3034G, DSO-X 3052G, DSO-X 3054G, DSO-X 3102G, DSO-X 3104G



- DSOX4022G, DSOX4024G, DSOX4032G, DSOX4034G, DSOX4052G, DSOX4054G, MSOX4022G, MSOX4024G, MSOX4032G, MSOX4034G
- EXR104A, EXR204A, EXR254A, EXR058A, EXR108A, EXR208A, EXR258A
- EXR054B, EXR104B, EXR204B, EXR254B, EXR058B, EXR108B, EXR208B, EXR258B, EXR404B, EXR408B, EXR604B, EXR608B
- MXR054A, MXR104A, MXR204A, MXR254A, MXR404A, MXR604A, MXR058A, MXR108A, MXR208A, MXR258A, MXR408A, MXR608A
- MXR054B, MXR104B, MXR204B, MXR254B, MXR404B, MXR604B, MXR058B, MXR108B, MXR208B, MXR258B, MXR408B, MXR608B
- HD304MSO, HD302MSO



# BenchVue Data Acquisition Control & Analysis App



### Model: BV0006B

Conveniently control your data acquisition units, easily visualize measurements and log data.

- 34970A
- 34972A
- 34980A
- DAQ970A
- DAQ973A





# BenchVue Power Meter/Power Sensor Control & Analysis App



### Model: BV0007B

Conveniently control your power meters and power sensors, analyze RF power measurements, and quickly log data.

- U2021XA, U2022XA
- U204x XA (5)
- U205x XA (7)
- U206x XA (7)
- U2000 Series (9)
- U2053/63 Series
- L2050/60 Series (17)
- U848x Series (5)
- N191xA (4)
- N8262A
- N1913B, N1914B





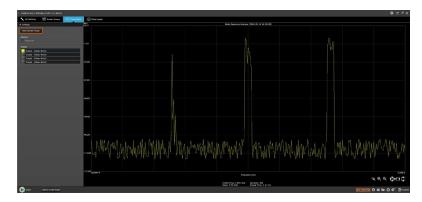
# BenchVue FieldFox Handheld Analyzer Control & Automation App



### Model: BV0010B

Use your FieldFox in spectrum analyzer or network analyzer modes to quickly control parameters, capture measurements over time and build automated tests.

- N9912A-N9918A (7)
- N9923A-N9928A (5)
- N9935A-N9938A (4)
- N9950A-N9952A (3)
- N9960A-N9962A (3)
- N9913B-N9918B (6)
- N9933B-N9938B (6)
- N9950B-N9953B (4)
- N9960B-N9963B (4)





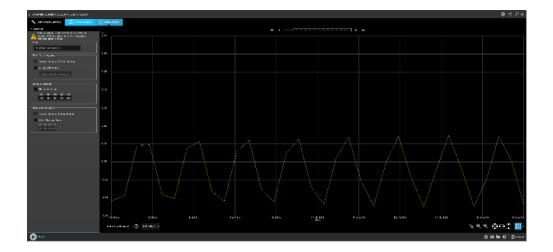
## **Universal Counter Control & Automation App**



### Model: BV0011B

Easily control your counters to quickly build automated tests and log data for faster analysis.

- 53210A
- 53220A
- 53230A



# BenchVue Electronic Load Control & Automation App



#### Model: BV0012B

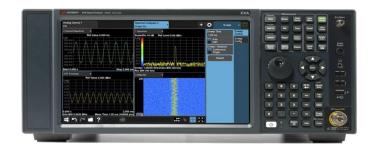
Easily control your electronic loads, build automated tests, and visualize measurements over time.

- N3300A, N3301A
- 6060B, 6063B
- EL33133A, EL34143A, EL34243A





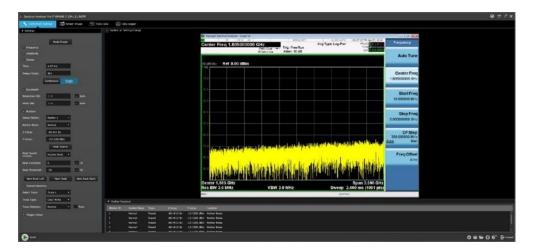
# BenchVue Spectrum Analyzer Control & Automation App



### Model: BV9001B

(Exclusively available in the BenchVue Complete Control Collection) Intuitively control your spectrum or signal analyzers, build automated tests, and log trace data.

- X-Series: N9040B UXA, N9030A/B PXA, N9020A/B MXA, N9010A/B EXA, N9000A/B CXA, M9290A CXA-m
- HSA: N9342C, N9343C, N9344C
- ESA: E4402B, E4403B, E4404B, E4405B, E4407B, E4408B, E4411B
- PSA: E4440A, E4443A, E4445A, E4446A, E4447A, E4448A
- BSA: N9320B, N9321C, N9322C, N9323C, N9324C
- Fieldfox: N9913B, N9914B, N9915B, N9916B, N9917B, N9918B, N9933B, N9934B, N9935B, N9936B, N9937B, N9938B, N9950B, N9951B, N9952B, N9953B, N9960B, N9961B, N9962B, N9963B





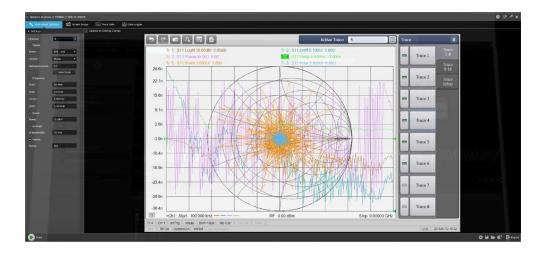
# BenchVue Network Analyzer Control & Automation App



### Model: BV9001B

(Exclusively available in the BenchVue Complete Control Collection) Intuitively control your network analyzers, quickly build automated tests and acquire trace data.

- ENA: E50xxA/B/C (5)
- PNA: N522xA/B (10)
- PNA-L: N523xA/B/C (11)
- PNA-X: N524xA/B (12)
- PXI VNAs: M937xA (6)
- PXIe multiport VNA: M9485A
- Fieldfox: N9917B, N9913B, N9914B, N9915B, N9916B, N9918B, N9933B, N9934B, N9935B, N9936B, N9937B, N9938B, N9950B, N9951B, N9952B, N9953B, N9960B, N9961B, N9962B, N9963B





## BenchVue Signal Generator Control & Automation App



### Model: BV9001B

(Exclusively available in the BenchVue Complete Control Collection)

- E4428C, E4438C
- E8257D, E8267D, E8663D
- EXG X-Series: N5171B, N5172B, N5173B
- MXG X-Series : N5181A/B, N5182A/B, N5183A/B

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# BenchVue Power Analyzer Control & Automation App



### Available to download for free

Conveniently control your power analyzers, quickly visualize measurements, and easily log data.

- PA2201A
- PA2203A





## **Solar Array Simulator Control**

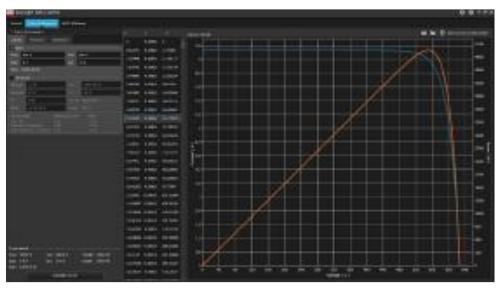


### Model: DG8901A

Easily create, manipulate, view, and execute photovoltaic I-V curves for testing PV inverters.

Supports the following models:

 N8937APV, N8957APV, PV8921A, PV8922A, PV8931A, PV8932A, RP7972A, RP7973A, RP7982A, RP7983A





# BenchVue Current Analyzer Control and Analysis App



### Model: BV0013B

Conveniently connect and control your current analyzers to quickly view measurements, build automated tests, and log data for analysis.

- CX3322A
- CX3324A





# BenchVue LCR Meter Control and Automation App



### Model: BV0014B

Connect and control your LCR meters to quickly view measurements, configure sweeps, build automated tests, and log data for analysis.

- E4980A
- E4980AL





## **USB Modular Digital Multimeter Control Pro App**



#### Model: BV0021B

Connect and control your USB Modular DMM to view measurements and plot or log data.

Supports the following model:

• U2741A





## USB Modular Function Generator Control Pro App

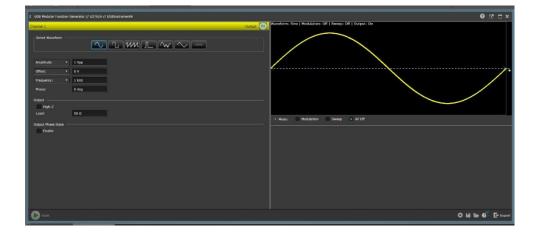


#### Model: BV0022B

Connect and configure your USB Modular function generator to create waveforms.

Supports the following model:

• U2761A





## USB Modular Source Measure Unit (SMU) Control Pro App



#### Model: BV0023B

Configure voltage and current source, range, and limits for USB Modular SMU channels and log data.

- U2722A
- U2723A

Channel 1		On Ch	hannel 2		00	Channel 3:		
Source Current		Sc	iource Current			Source Current		
Voltage:	207.275 mV	v	oltage:	998.169 mV		Voltage:	199.829 mV	
Current:	91.5527 nA	0	urrent:	61.0352 nA		Current:	-915.527 nA	
Range 2 V 1 mA		Ra	tange 2V 1mA			Range 2 V 10 mA		
Basic Settings			asic Settings			Basic Settings		
Voltage Range: 2 V			Voltage Range:			Voltage Range:		
Current Range: 1 m			Current Range:			Current Range:		
			Source:			Source:		
Drive Current: 1 m	A		Drive Current:	1 mA		Drive Current:	0 mA	
Input Protection: 200			Input Protection:			Input Protection:	00 mV	
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Maximum Resistance 20.2	2 69	2	Maximum Resistance for Open Circuit:	20.2 GQ		Maximum Resistance for Open Circuit:	10.2 GΩ	



## **USB Modular Oscilloscope Control Pro App**



#### Model: BV0024B

Configure and control your USB Modular oscilloscope to capture screen images, record trace data and log measurements.

- U2701A
- U2702A

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tivert							
DW Link							
Coupling: DC -							
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## **USB Modular Data Acquisition Control Pro App**



#### Model: BV0025B

Connect and configure your USB Modular DAQ channels to make measurements and log data.

- U2351/2/3/4/5/6A
- U2331A
- U2531A
- U2541A, U2542A
- U2651/2/3A

				Bench Vo						
										0 C e
	Tenner Analog Output	-le pata	10 🛃 00	unter 🗐 t	ata Logger					
			inglie Shok Dala							
	< 1 /10 > >>	1								
Numbe	r Tinestang	Chine 1	Channel 2	Clannel 3	Channel 4	Channel S	Channel 6	Durvel 7	Charred 6	
1	2017-03-07 14:45:56.242	-412.2925 mV	-356.4453 mV	-725.4028 mV	-1.0156250 V	-1.8063354 V	-2.4151611 V	-2.7807617 V	-3.1295776 V	
	2017-03-07 14:45:56.243	-2.5164355 V	-2.1325684 V	-1.8487549 V	-1.6421509 V	-1.6329956 V	-1.7355347 V	-1.8820190 V	-2.0553589 V	
	2017-03-07 14:45:56.244			-2.1594238 V						
	2017-03-07 14:45:50.245			-2.0016040 V			-2.0101929 V			
	2017-03-07 14:45:56.246		-1.9931030 V	-2.0214844 V			-2.0239258 V			
6 7	2017-03-07 14:45:56.247		-2.0007324 V	-2.0141602 V			-2.0144653 V			
7	2017-02-07 14:45:56.248		-2.0086570 V	-2.0187378 V			-2.0111084 V			
	2017-03-07 14:45:56.249 2017-03-07 14:45:56.250		~2.0111084 V	-2.0208740 V -2.0217896 V			-2.0111084 V -2.0111084 V			
10	2017-03-07 14:45:56.250 2017-03-07 14:45:56.251		-2.0111084 V	-2.0217896 V			-2.0111084 V		-1.9404500 V -1.9401548 V	
11	2017-03-07 14:45:56.252		-2.0111084 V	-2.0217896 V			-2.0117188 V			
12	2017-03-07 14:45:56.253		-2.0111084 V	-2.0214844 V	-2.0050049 V				1.0954800 V	
13	2017-03-07 14:45:56.254		2.0108032 V				-2.0120239 V			
	2017-02-07 14:45:56.255	-2.0214844 V	-2.0114136 V	-2.0223999 V	-2.0050049 V	-2.0230103 V	-2.0120239 V	-2.0156060 V	-1.9967651 V	
	2017-03-07 14:45:56.256		-2.0111084 V		-2.0053101 V	-2.0233154 V	-2.0120239 V		-1.9967651 V	
	2017-03-07 14:45:56.257	-2.0217896 V	-2.0117168 V	-2.0220947 V	-2.0056152 V	-2.0230103 V	-2.0123291 V	-2.0156860 V	-1.9970703 V	
				-2.0223999 V						
		-2.0227051 V		-2.0220947 V	-2.0056152 V	-2.0230103 V	-2.0126341 V	-2.0159912 V	-1.9967651 V	
	2017-05-07 14:45:56.200						-2.0123291 V			
20	2017-03-07 14:43:56.261		-2.0117188 V	-2.0223999 V		-7.0233154 V			-1.9970703 V	
	2017-03-07 14:45:56.282		-2.0123291 V	-2.0227051 V	-2.0059204 V	-2.0233154 V	-2.0126343 V		-1.9970703 V	
	2017-03-07 14:45:50.263		-2.0120239 V	-2.0227051 V	-2.0065308 V	-2.0236206 V	-2.0126343 V		-1.9976807 V	
23	2017-03-07 14:45:56.264		-2.0117188 V	-2.0227051 V	-2.0055204 V		-2.0126343 V			
24	2017-03-07 14:45:56.265	-2.0320947 V	-2.0123291 V	-2.0230103 V	-2.0062256 V	-2.0230206 V	-2.0126343 V	-2.0182964 V	-1.9976807 V	
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## **USB Modular Switch Matrix App**





Easily open and close relays channels on your USB Modular switch matrix.

## **Serial Control & Automation App**



### Available to download for free

Intuitively send receive commands from your serial devices to your PC. Control and automate serial devices within BenchVue along with your instruments.



## PathWave BenchVue Lab Management and Control Solution



### Model: PW9111EDU

PathWave BenchVue Lab Management and Control Solution is a network-based application that enables interconnection of all instruments via LAN or WLAN. It provides centralized control for educators to seamlessly connect and monitor all instruments within the teaching lab.

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## PathWave BenchVue AC Source Control Software



#### Model: BV0026B

The PathWave BenchVue AC source control software controls and analyses your AC source measurements to understand the impact of events related to power draw.

Supports the following models:

 AC6903L, AC6903H, AC6906L, AC6912L, AC6918L, AC6906H, AC6912H, AC6918H



## PathWave BenchVue AC Source Avionics Standard Test Software





#### Model: BV0028B

Control your AC source and accelerate pre-compliance testing as per the avionics and military-standard requirements at ease.

Supports the following models:

 AC6903L, AC6903H, AC6906L, AC6912L, AC6918L, AC6906H, AC6912H, AC6918H



## PathWave BenchVue AC Source Pre-Compliance Test Software





### Model: BV0030B

Control your AC source and accelerate pre-compliance testing as per the avionics and military-standard requirements at ease.

Supports the following models:

 AC6903L, AC6903H, AC6906L, AC6912L, AC6918L, AC6906H, AC6912H, AC6918H



## Advanced Power Control and Analysis for a Single Instrument



#### Model: BV9201B

Connect easily and access your Power Supply's advanced sourcing and measurement features. Allows user to control a single instrument.

```
    N6705, N6731B,N6732B, N6733B, N6734B, N6735B, N6736B, N6741B,
N6742B, N6743B, N6744B, N6745B, N6746B,
N6751A, N6752A, N6753A, N6754A, N6755A, N6756A, N6761A,
N6762A, N6763A, N6764A, N6765A, N6766A, N6773A, N6774A,
N6775A, N6776A, N6777A, N6781A, N6782A, N6783A-BAT, N6783A-MFG,
N6784A, N6785A, N6786A, N6791A, N6792A, N7950A, N7951A, N7952A,
N7953A, N7954A, N7970A, N7971A, N7972A, N7973A, N7974A, N7975A,
N7976A, N7977A, N69143A, N69145A, N69146A, N69172A, N69173A,
RP7951A, RP7951AT, RP7952A, RP7952AT, RP7953A, RP7961A, RP7962A,
RP7963A, RP7931A, RP7932A, RP7933A, RP7935A, RP7936A, RP7941A,
RP7942A, RP7943A, RP7945A, RP7946A, RP7972A, RP7973A, RP7982A, RP7983A, RP7984A,
E36154A, E36155A
```





## Advanced Power Control and Analysis Supports up to Four Instruments



#### Model: BV9200B

Connect easily and access your Power Supply's advanced sourcing and measurement features. Allows user to control up to four instruments.

Supports the following models:

 N6705, N6731B,N6732B, N6733B, N6734B, N6735B, N6736B, N6741B, N6742B, N6743B, N6744B, N6745B, N6746B,
 N6751A, N6752A, N6753A, N6754A, N6755A, N6756A, N6761A,
 N6762A, N6763A, N6764A, N6765A, N6766A, N6773A, N6774A,
 N6775A, N6776A, N6777A, N6781A, N6782A, N6783A-BAT, N6783A-MFG,
 N6784A, N6785A, N6786A, N6791A, N6792A, N7950A, N7951A, N7952A,
 N7953A, N7954A, N7970A, N7971A, N7972A, N7973A, N7974A, N7975A,
 N7976A, N7977A, N69143A, N69145A, N69146A, N69172A, N69173A,
 RP7951A, RP7951AT, RP7952A, RP7952AT, RP7953A, RP7961A, RP7962A,
 RP7963A, RP7931A, RP7932A, RP7933A, RP7935A, RP7936A, RP7941A,
 RP7942A, RP7943A, RP7945A, RP7946A, RP7972A, RP7973A, RP7982A, RP7983A, RP7984A,
 E36154A, E36155A





## Advanced Battery Test and Emulation Software for a Single Instrument

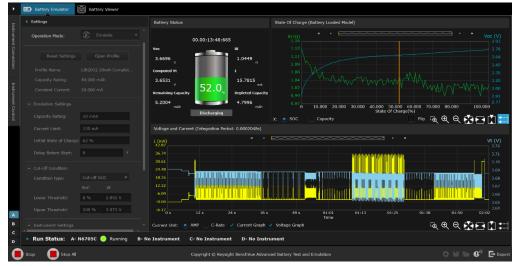


#### Model: BV9211B

Connect easily and access your Power Supply's advanced sourcing and measurement features. Allows user to control a single instrument.

Supports the following models:

N6705A, N6705B, N6705C, N6700C, N6701C, N6702C
 N6781A, N6782A, N6784A, N6785A, N6786A
 N7950A, N7951A, N7952A, N7953A, N7954A, N7970A, N7971A, N7972A, N7973A, N7974A, N7976A, N7977A, N7953ALG,
 RP7951A, RP7952A, RP7953A, RP7961A, RP7962A, RP7963A, RP7951AT,
 RP7952AT, RP7953AT, RP7961AT, RP7962AT, RP7963AT, RP7931A, RP7932A,
 RP7933A, RP7935A, RP7936A, RP7941A, RP7942A, RP7943A, RP7945A,
 RP7946A, RP7972A, RP7973A, RP7982A, RP7983A, RP7984A,
 34970A, 34972A, DAQ970A, DAQ973A, E36731A





## Advanced Battery Test and Emulation Software Supports up to Four Instruments





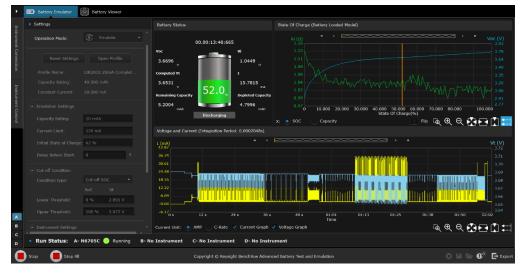


### Model: BV9210B

Connect easily and access your Power Supply's advanced sourcing and measurement features. Allows user to control up to four instruments.

Supports the following models:

N6705A, N6705B, N6705C, N6700C, N6701C, N6702C
 N6781A, N6782A, N6784A, N6785A, N6786A
 N7950A, N7951A, N7952A, N7953A, N7954A, N7970A, N7971A, N7972A, N7973A, N7974A, N7976A, N7977A, N7953ALG,
 RP7951A, RP7952A, RP7953A, RP7961A, RP7962A, RP7963A, RP7951AT,
 RP7952AT, RP7953AT, RP7961AT, RP7962AT, RP7963AT, RP7931A, RP7932A,
 RP7933A, RP7935A, RP7936A, RP7941A, RP7942A, RP7943A, RP7945A,
 RP7946A, RP7972A, RP7973A, RP7982A, RP7983A, RP7984A,
 34970A, 34972A, DAQ970A, DAQ973A, E36731A





## PathWave IV Curve Measurement Software



#### Model: PW9251A

Accelerate your research, development and design verification by quick and easy execution of synchronous current-voltage (IV) measurements without programming, immediately reviewing test results on graphs and tables, and generate report efficiently.

- B2901A, B2902A, B2911A, B2912A, B2961A, B2962A
- B2901B, B2902B, B2911B, B2912B, B2961B, B2962B, B2901BL, B2910BL
- PZ2100A, PZ2120A, PZ2121A, PZ2130A, PZ2131A, PZ2110A



## PathWave Advanced Power Control & Analysis Software



### Model: PW9252A

Connect easily and access your Power Supply's advanced sourcing and measurement features.

Supports the following models:

N6705A, N6705B, N6705C, N6731B,N6732B, N6733B, N6734B, N6735B, N6736B, N6741B, N6742B, N6743B, N6744B, N6745B, N6746B, N6751A, N6752A, N6753A, N6754A, N6755A, N6756A, N6761A, N6762A, N6763A, N6764A, N6765A, N6766A, N6773A, N6774A, N6775A, N6776A, N6777A, N6781A, N6782A, N6783A-BAT, N6783A-MFG, N6784A, N6785A, N6786A, N6791A, N6792A, N7950A, N7951A, N7952A, N7953A, N7954A, N7970A, N7971A, N7972A, N7973A, N7974A, N7975A, N7975A, N7977A, N69143A, N69145A, N69146A, N69172A, N69173A, R79951A, RP7951AT, RP7952A, RP7952AT, RP7953A, RP7961A, RP7962A, RP7963A, RP7931A, RP7932A, RP7933A, RP7935A, RP7936A, RP7941A, RP7942A, RP7943A, RP7945A, RP7946A, RP7971A, RP7972A, RP7973A, RP7973A, RP7981A, RP7982A, RP7983A, RP7984A, E36155A



## PathWave Advanced Battery Test and Emulation Software



#### Model: PW9253A

Connect easily and access your Power Supply's advanced sourcing and measurement features.

Supports the following models:

N6705A, N6705B, N6705C N6700C, N6701C, N6702C N6781A, N6782A, N6784A, N6785A, N6786A N7950A, N7951A, N7952A, N7953A, N7954A, N7970A, N7971A, N7972A, N7973A, N7974A, N7976A, N7977A, N7953ALG, RP7951A, RP7952A, RP7953A, RP7961A, RP7962A, RP7963A, RP7951AT, RP7952AT, RP7953AT, RP7961AT, RP7962AT, RP7963AT, RP7931A, RP7932A, RP7933A, RP7935A, RP7936A, RP7941A, RP7942A, RP7943A, RP7945A, RP7946A, RP7971A, RP7972A, RP7973A, RP7981A, RP7982A, RP7983A, RP7984A 34970A, 34972A, DAQ970A, DAQ973A E36731A



## PathWave Advanced Power Application Suite Bundle Software



#### Model: PW9254A

The PW9254A bundle software includes licensing for three applications:

- PathWave IV curve measurements PW9251A
- PathWave advanced power control and analysis PW9252A
- PathWave advanced battery test and emulation PW9253A

### **BenchVue Software Supported Instruments**

Each of the BenchVue apps support certain Keysight instrument models. These apps are updated regularly with additional models. For the most current supported instrument list,

visit: www.keysight.com/find/BenchVueInstruments



## **BenchVue Demonstration Mode**

BenchVue includes a demonstration mode that does not require instruments to be connected, making product evaluation quick and easy. Simply download and click "enable demo mode" under the global setting menu to begin exploring BenchVue functionality.

			ප _	
	Instru	iment	Select In	strument $\lor$
	Connected Instruments			
	Select instrument from ta	able below	v to begin.	
	Available Instruments			
	Filter Instruments		$\nabla$	ి 😶
	EDU36311A EDU36311A, Keys USB0::0x2A8D::0x		emo Mode	
	Don't see your instrument or have com Use the Keysight Connection Expert ap			
No instrument connected. Select an instrument to begin.				

Figure1. Demo mode in standalone application

Refresh
My Instruments
IO Manage Instruments
License Details
Activate License
D Enter Demo Mode

Figure 2. Demo mode in non-standalone application

To assist in the evaluation of BenchVue with physical instruments, BenchVue includes an integrated help file and getting started guide to make setup quick and easy.



# License Terms, License Types, and Support Subscriptions

You can now choose your license type (node-locked (fixed), transportable, floating (single site, single region, worldwide), or USB portable), license term (perpetual or subscription), and then choose the KeysightCare Software Support subscription period that best meets your needs. See more details below.

### License terms

License term	Description
Perpetual	Licenses can be used indefinitely.
Subscription	Licenses can be used through the term of the subscription.

### License types

License type	Description
Node-locked	License can be used on one specified instrument/computer.
Transportable	License can be used on one instrument/computer at a time but may be transferred to another using Keysight Software Manager (internet connection required).
USB portable	License can be used on one instrument/computer at a time but can be transferred to another using a certified USB dongle (available for additional purchase, Keysight part number E8900-D10).
Floating	Networked instruments/computers can access a license from a server one at a time. Multiple licenses may be purchased for concurrent usage. Three types of floating license are available: <b>Single Site:</b> 1-mile radius from the server; <b>Single Region</b> <sup>1</sup> : Americas; Europe; Asia; <b>Worldwide</b> (export restriction identified in End User License Agreement (EULA))

### KeysightCare Software Support subscriptions

Subscription	Description
KeysightCare Software Support	Perpetual licenses are sold with a 12 (default), 24, 36, or 60-month software support subscription. Support subscriptions may be renewed for a fee after that.
	Software subscription licenses include software support through the term of the license.

<sup>&</sup>lt;sup>1</sup> Americas (North, Central, and South America, Canada); Europe (European Continent, Middle Eastern Europe, Af rica, India); Asia (North and South Asia Pacif ic Countries, China, Taiwan, Japan)



# Ordering New BenchVue Software Apps and Collections

Step 1: Choose your software product.

Step 2: Choose your license: perpetual or subscription.

Step 3: Choose your license type: node-locked, transportable, USB portable, or floating.

Step 4: Depending on the license term, choose your subscription or support duration.

Product	License Type	License Term				
		Perpetual		Subscription		
		License	Support	License & Support		
	Node-locked					
	Transportable					
E.g:BV0001B	USB Portable <sup>1</sup>	SW1000-LIC-01	SW1000-SUP-01	SW1000-SUB-01		
	Floating (single					
	site, single region,					
	worldwide)					

License Term	Perpetual	Subscription
	12 months	3 months
	24 months	6 months
Support Duration	36 months	12 months
	60 months	24 months
		36 months

<sup>1</sup>USB portable license requires a certified USB dongle (available for additional purchase, Keysight part number SW1000-D10)

An Entitlement Certificate is delivered with each purchased software order. Follow the directions on the certificate to redeem your order for your license. License redemption requires an internet connection.

BenchVue Node-locked licenses purchased separately i.e. are node-locked to a PC and not to an instrument.



## **Floating License Server Requirements**

Network Floating licenses require loading a vendor daemon on a license server. This server may be the same PC running BenchVue software or a separate server. Full installation instructions (5951-5739) and support are provided for compatible server operating systems:

Keysight license server software (Imgrd.exe and agileesofd.exe) is supported on: Microsoft Windows 7 Enterprise SP1(32-bit and 64-bit) Microsoft Windows 10 Creators Update (32-bit and 64-bit), 64-bit Red Hat Linux v7.0

Keysight License Manager 6 is supported on: 64-bit Microsoft Windows 7 Enterprise SP1, Microsoft Windows 10 Creators Update 64-bit

The license server software is supported on 32-bit and 64-bit Windows and 64-bit Linux systems, but the Keysight License Manager 6 utility is supported on 64-bit Windows systems only. To setup licensing on 32-bit Windows and on Linux systems, use the processes described in the Manual License Setup section of https://literature.cdn.keysight.com/litweb/pdf/5951-5739.pdf.

## **System and Installation Requirements**

Windows 10,11	64-bit (version 1809 or later)	
Computer hardware	Recommended Processor: Intel Core i5 (or equivalent) RAM: 16 GB	
	Storage: 900 MB free space for Windows	
Interfaces	USB, GPIB, LAN, RS-232	
Display resolution	1280x1024 minimum recommended for single instrument view (higher resolution recommended for multiple instrument view) 1920 x 1080 minimum <sup>1</sup>	
Data Exports to Excel or csv <sup>1</sup>	Pathwave supports Microsoft Office 2003 and later <sup>1</sup>	

Computer operating system



### **Additional requirements**

BenchVue requires a VISA library when used to connect to physical instruments. Keysight IO Libraries Suite, which contains the necessary VISA, will be downloaded and installed automatically when BenchVue is installed if needed. IO Libraries Suite 2024 Update 2 or newer is recommended. IO Libraries Suite information is available at: www.keysight.com/find/iosuite

### **BenchVue software for PC**

Download a free 30-day trial today at: www.keysight.com/find/BenchVue

Keysight also offers a variety of optional start-up assistance and project consulting services to help you maximize your test development productivity.

Contact your Keysight sales specialist www.keysight.com/find/services



Mess- und Prüftechnik. Die Experten.

Ihr Ansprechpartner / Your Partner:

dataTec AG E-Mail: info@datatec.eu >>> www.datatec.eu



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.

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