

2025 Power Supply Selection Guide



Clean and reliable power



Power Solutions from B&K Precision

For more than seven decades B&K Precision has provided reliable test and measurement instruments with global service and support. Power supplies are one of our most popular product categories and this guide will help you confidently select from a wide range of low-power (30 W) benchtop to high-power (20000 W) ATE-ready solutions and more.

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Finding the right power supply

Start by viewing common selection criteria listed below.

Common power supply selection criteria

- Total output power
- Voltage and current ranges
- Ripple & noise
- Number of output channels
- Interfaces
- Form factor
- Programming resolution and programming accuracy
- List mode
- Transient response time



ElectriKit

A helpful tool for electricians, technicians, engineers, students, hobbyists and anyone dealing with electrical power.

Key Features

- Calculate DC power and single or three-phase AC true power, reactive power, and apparent power
- Delta-wye transformation, voltage drop, AWG size, THD, horsepower, resistor color, low/high pass filter, and battery life calculators
- Ampacity table for insulated conductors per NEC Table 310.16, SMD resistor code calculator, and dBm conversion



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Dual-Range and Multi-Range



Also referred to as "autoranging", multi-range power supplies provide more flexibility than traditional power supplies by extending the operating range beyond a single maximum power point. These supplies can provide any combination of higher voltage or higher current along a maximum power curve. This design helps save both bench space and cost by eliminating the need for having multiple power supplies on the bench or buying more power than necessary.

Madal		Max	Max	Max	Pango	Dinalo & Noico	List Made	Interfaces					
	Mouel	Power	Voltage	Current	Kaliye	Ripple & Noise	LIST MOUE	USB	RS232	GPIB	RS485	LAN	
	BCS6401	90 W	± 9 V, ± 15 V	5 A, 3 A	Dual	≤ 1 mVrms / ≤ 3 mVpp	•	•	-	-	-	•	
	9171B	100 W	10 V, 20 V	10 A, 5 A	Dual	≤ 0.35 mVrms / ≤ 3 mVpp	•	•	0	0	0	0	
	9172B	105 W	35 V, 70 V	3 A, 1.5 A	Dual	≤ 0.5 mVrms / ≤ 5 mVpp	•	•	0	0	0	0	
	1737	120 W	30 V, 60 V	3 A, 2 A	Dual	≤ 1 mVrms	-	-	•	-	-	-	
e	9181B	144 W	18 V, 36 V	8 A, 4 A	Dual	≤ 0.35 mVrms / ≤ 3 mVpp	•	•	0	О	0	0	
Ranç	9173B	200 W	10 V, 20 V x 2	10 A, 5 A x 2	Dual	≤ 0.35 mVrms / ≤ 3 mVpp	•	•	0	0	0	0	
ual-I	9182B	200 W	10 V, 20 V	20 A, 10 A	Dual	≤ 0.35 mVrms / ≤ 3 mVpp	•	•	0	О	0	0	
	9184B	200 W	100 V, 200 V	2 A, 1 A	Dual	≤ 1.5 mVrms / ≤ 15 mVpp	•	•	0	0	0	0	
	9174B	210 W	35 V, 70 V x 2	3 A, 1.5 A x 2	Dual	≤ 0.5 mVrms / ≤ 5 mVpp	•	•	0	0	0	0	
	9183B	210 W	35 V, 70 V	6 A, 3 A	Dual	≤ 0.5 mVrms / ≤ 5 mVpp	•	•	0	0	0	0	
	9185B	210 W	400 V, 600 V	0.5 A, 0.35 A	Dual	≤ 4.5 mVrms / ≤ 45 mVpp	•	•	0	0	0	0	
	1747	300 W	35 V, 60 V	10 A, 5 A	Dual	≤1 mVrms	-	-	•	-	-	-	
	0110	100.00	<u> </u>	F A	Multi	< 2 m)/mm =			r :				
	9110	100 W	60 V	5 A	Multi	≤ 2 mvrms	-	-	-	-	-	-	
	9240	120 W	32 V	8 A	Multi	≤ 1 mvrms / ≤ 5 mvpp	•	•	-	0	-	े र	
	9241	120 W	60 V	4 A	Multi	$\leq 2 \text{ mVrms} / \leq 10 \text{ mVpp}$	•	•	-	0	-	\$ 7	
	9111	180 W	60 V	8 A	Multi	≤ 5 mVrms	-	-	-	-	-	-	
	9201B	200 W	60 V	10 A	Multi	≤ 8 mVpp	•	•	•	-	-	-	
	9242	200 W	60 V	10 A	Multi	≤ 1 mVrms / ≤ 5 mVpp	•	•	-	0	-	\$	
	9140	300 W	32 V x 3	8 A x 3	Multi	≤ 1 mVrms / ≤ 5 mVpp	•	•	-	0	-	\$	
ge	9141	300 W	60 V x 3	4 A x 3	Multi	≤ 2 mVrms / ≤ 10 mVpp	•	•	-	0	-	☆	
Ran	9202B	360 W	60 V	15 A	Multi	≤ 15 mVpp	•	•	•	-	-	-	
Iulti-	9205B	600 W	60 V	25 A	Multi	≤ 20 mVpp	•	•	•	-	-	-	
2	9206B	600 W	150 V	10 A	Multi	≤ 50 mVpp	•	•	•	-	-	-	
	9115/B/-AT	1200 W	80 V	60 A	Multi	≤ 60 mVpp	•	•	•	0	•	-	
	9116/B	1200 W	150 V	30 A	Multi	≤ 60 mVpp	•	•	•	0	•	-	
	MR3K160120	3000 W	160 V	120 A	Multi	≤ 48 mVrms / ≤ 120 mVpp	•	•	•	•	•	\$	
	MR160120	5000 W	160 V	120 A	Multi	≤ 48 mVrms / ≤ 160 mVpp	•	•	•	•	•	☆	
	MR25080	5000 W	250 V	80 A	Multi	≤ 85 mVrms / ≤ 500 mVpp	•	•	•	•	•	\$	
	MR50040	5000 W	500 V	40 A	Multi	≤ 75 mVrms / ≤ 600 mVpp	•	•	•	•	•	☆	
	MR100020	5000 W	1000 V	20 A	Multi	≤ 120 mVrms / ≤ 700 mVpp	•	•	•	•	•	\$	

ATE System Power Solutions



- Up to 20000 W with voltage and current configurations up to 1500 V, 120 A
- Flexible I/O interfaces such as GPIB, LAN, USB, RS232, and analog control
- Programmability via SCPI commands, LabVIEW drivers, or application software allow for remote initiation and operation
- High programming accuracy combined with precise built-in measurements
- Comprehensive protection features such as OVP, OCP, and OTP to safeguard your DUT

Designed for easy integration into automated test equipment systems, our compact XLN, MPS, HPS, and MR series DC power supplies offer the power density, speed, and accuracy needed to meet today's system design challenges.

				Respon	Response Time		
Model	Max Power	Max Voltage	Max Current	Rise Time Full Load (ms)/ No Load (ms)	Fall Time Full Load (ms)/No Load (ms)	Transient Response Time (for a load change from 50 to100% of rated output current)	Adjustable Slew Rate
MPS1101	100 W	15 V	20 A	≤ 20 / ≤ 20	≤ 20 / ≤ 200		0.001 to 750 V/s
MPS1102	100 W	32 V	9.5 A	≤ 10 / ≤ 10	≤ 10 / ≤ 250		0.001 to 3200 V/s
MPS1103	100 W	60 V	5 A	≤ 20 / ≤ 20	≤ 20 / ≤ 250		0.001 to 3000 V/s
MPS1104	100 W	100 V	3 A	≤ 20 / ≤ 20	≤ 25 / ≤ 250	≤ 0.5 ms for output to recover within 0.5% of	0.001 to 5000 V/s
MPS1301	300 W	15 V	20 A	≤ 20 / ≤ 20	≤ 20 / ≤ 200	its rated output	0.001 to 750 V/s
MPS1302	300 W	32 V	9.5 A	$\leq 10 / \leq 10$	≤ 10 / ≤ 250		0.001 to 3200 V/s
MPS1303	300 W	60 V	5 A	≤ 20 / ≤ 20	≤ 20 / ≤ 250		0.001 to 3000 V/s
MPS1304	300 W	100 V	3 A	≤ 20 / ≤ 20	≤ 25 / ≤ 250		0.001 to 5000 V/s
9115/B/-AT	1200 W	80 V	60 A	-	-	-	-
9116/B	1200 W	150 V	30 A	-	-	-	-
XLN3640 (-GL)	1440 W	36 V	40 A	≤ 15 / ≤ 15	≤ 15 / ≤ 1000	≤ 1 ms	0.01 to 2.4 V/ms
XLN6024 (-GL)	1440 W	60 V	24 A	≤ 20 / ≤ 20	≤ 20 / ≤ 1000	≤ 1 ms	0.01 to 3 V/ms
XLN8018 (-GL)	1440 W	80 V	18 A	≤ 25 / ≤ 25	≤ 25 / ≤ 1000	≤ 1 ms	0.01 to 3.2 V/ms
XLN10014 (-GL)	1440 W	100 V	14.4 A	≤ 30 / ≤ 30	≤ 30 / ≤ 1000	≤ 1 ms	0.01 to 3.3 V/ms
XLN15010 (-GL)	1560 W	150 V	10.4 A	≤ 100 / ≤ 100	$\leq 100 / \leq 1000$	≤ 2 ms	0.01 to 1 V/ms
XLN30052 (-GL)	1560 W	300 V	5.2 A	≤ 100 / ≤ 100	≤ 100 / ≤ 2000	≤ 2 ms	0.01 to 3.3 V/ms
XLN60026 (-GL)	1560 W	600 V	2.6 A	≤ 100 / ≤ 100	≤ 100 / ≤ 3000	≤ 2 ms	0.01 to 6.6 V/ms
PVS60085MR	3000 W	600 V	8.5 A	≤ 100 / ≤ 100	≤ 150 / ≤ 3000	\leq 0.5 ms for output to recover within 0.5% of its rated output	0 to 6 V/ms
MR3K160120	3000 W	160 V	120 A	≤ 30 / ≤ 30	≤ 80 / ≤ 10000	≤ 1.5 ms	-
MR160120	5000 W	160 V	120 A	≤ 30 / ≤ 30	≤ 50 / ≤ 10000	≤ 1.5 ms	-
MR25080	5000 W	250 V	80 A	≤ 30 / ≤ 30	≤ 55 / ≤ 8000	≤ 1.5 ms	-
MR50040	5000 W	500 V	40 A	≤ 30 / ≤ 30	≤ 40 / ≤ 10000	≤ 1.5 ms	-
MR100020	5000 W	1000 V	20 A	≤ 30 / ≤ 30	≤ 50 / ≤ 10000	≤ 1.5 ms	-
PVS10005	5000 W	1000 V	5 A	≤ 250 / ≤ 250	≤ 250 / ≤ 5000	\leq 0.5 ms for output to recover within 0.5% of its rated output	0 to 4 V/ms
PVS60085	5100 W	600 V	8.5 A	≤ 100 / ≤ 100	≤ 100 / ≤ 3000	\leq 0.5 ms for output to recover within 0.5% of its rated output	0 to 6 V/ms
HPS20K800	20000 W	800 V	25 A	≤ 40 / ≤ 10	≤ 60 / ≤ 10000	\leq 3 ms for output to recover within 0.5% \pm 25 mV of its rated output	0 to 24 V/s
HPS20K1500	20000 W	1500 V	13.4 A	≤6/≤5	≤ 25 / ≤ 1000	\leq 3 ms for output to recover within 0.5% \pm 25 mV of its rated output	0 to 45 V/s

ATE System Power Solutions (cont.)







				Interfaces				Rackmount		
Model	USB	RS232	RS485	Analog Control	GPIB	LAN	Digital I/O	Kackmount Kit	Height	
MPS1000	•	-	-	-	•	☆	•	•	1U	
MPS1001	•	-	-	-	•	☆	•	•	1U	
9115/B/-AT	•	•	•	•	о	-	-	•	1U	
9116/B	•	•	•	•	о	-	-	•	1U	
XLN3640 (-GL)	•	-	•	•	о	0	-	о	1U	
XLN6024 (-GL)	•	-	•	•	о	0	-	о	1U	
XLN8018 (-GL)	•	-	•	•	о	0	-	0	1U	
XLN10014 (-GL)	•	-	•	•	о	0	-	0	1U	
XLN15010 (-GL)	•	-	•	•	о	0	-	о	1U	
XLN30052 (-GL)	•	-	•	•	0	0	-	0	1U	
XLN60026 (-GL)	•	-	•	•	о	0	-	о	1U	
PVS60085MR	•	•	•	•	•	•	-	о	2U	
MR3K160120	•	•	•	•	•	☆	-	о	2U	
MR160120	•	•	•	•	•	☆	-	0	2U	
MR25080	•	•	•	•	•	☆	-	о	2U	
MR50040	•	•	•	•	•	☆	-	0	2U	
MR100020	•	•	•	•	•	☆	-	0	2U	
PVS10005	•	•	•	•	•	•	-	0	2U	
PVS60085	•	•	•	•	•	•	-	0	2U	
HPS20K800	-	•	-	•	-	•	-	-	3U	
HPS20K1500	-	•	-	•	-	•	-	-	3U	

"•" Standard "o" Optional

"☆" LXI-compliant

Programmable to 300 W







These DC power supplies offer high speed and accuracy combined with advanced features such as DUT protection, list mode, and full programmability. Most supplies offer a SCPI compatible command set and come with LabVIEW drivers. Many of these power supplies are suitable for both benchtop and rack-mount applications.

Madal	Dowor	Max	Max	Max Current	Max Current	Ripple &	Progra Acci	amming uracy	Progra Reso	mming lution			Interf	aces			nount it
Mouel	Puwer	Voltage	Current	Noise	Voltage	Current	Voltage	Current	USB	RS232	RS485	Analog Control	GPIB	LAN	Rackr K		
1739	30 W	30 V	1 A	< 1 mVrms	0.5% + 2 digits	0.5% + 2 digits	10 mV	0.1 mA	-	•	-	-	-	-	-		
BCS6401	90 W	± 15 V	5 A	≤ 1 mVrms	≤ 0.02% + 3 mV	< 0.05% + 2 mA	1 mV	100 nA	٠	-	-	-	-	•	0		
9171B	100 W	10 V, 20 V	10 A, 5 A	≤ 0.35 mVrms / ≤ 3 mVpp	≤ 0.05% + 5 mV	≤ 0.1% + 2 mA	1 mV	1 mA	•	о	0	о	0	0	0		
9172B	105 W	35 V, 70 V	3 A, 1.5 A	≤ 0.5 mVrms / ≤ 5 mVpp	≤ 0.05% + 10 mV	≤ 0.1% + 1 mA	2 mV	0.1 mA	•	0	0	о	0	0	0		
9240	120 W	32 V	8 A	≤ 1 mVrms / ≤ 5 mVpp	0.03% + 4 mV	0.1% + 5 mA	1 mV	1 mA	•	-	-	-	0	☆	0		
9241	120 W	60 V	4 A	≤ 2 mVrms / ≤ 10 mVpp	0.03% + 8 mV	0.1% + 3 mA	1 mV	1 mA	•	-	-	-	о	☆	0		
9181B	144 W	18 V, 36 V	8 A, 4 A	≤ 0.35 mVrms / ≤ 3 mVpp	≤ 0.05% + 5 mV	≤ 0.1% + 2 mA	1 mV	1 mA	•	о	0	о	о	0	0		
BCS6402	150 W	± 30 V	5 A	≤ 1 mVrms	≤ 0.02% + 3 mV	< 0.05% + 3 mA	1 mV	100 nA	•	-	-	-	-	•	0		
1698B	200 W	60 V	3.3 A	≤ 30 mVpp	1.5% + 2 counts	1.5% + 2 counts	10 mV	1 mA	•	-	•	-	-	-	-		
9201B	200 W	60 V	10 A	≤8 mVpp	≤ 0.03% + 5 mV	≤ 0.1% + 10 mA	1 mV	0.1 mA	٠	٠	-	-	-	-	0		
9242	200 W	60 V	10 A	≤ 2 mVrms / ≤ 10 mVpp	0.03% + 8 mV	0.1% + 3 mA	1 mV	1 mA	•	-	-	-	о	☆	0		
9182B	200 W	10 V, 20 V	20 A, 10 A	≤ 0.35 mVrms / ≤ 3 mVpp	≤ 0.05% + 5 mV	≤ 0.1% + 5 mA	1 mV	1 mA	•	о	0	о	о	0	0		
9173B	200 W	10 V, 20 V x 2	10 A, 5 A x 2	≤ 0.35 mVrms / ≤ 3 mVpp	≤ 0.05% + 5 mV	≤ 0.1% + 2 mA	1 mV	1 mA	•	0	0	о	о	0	0		
1696B	200 W	20 V	10 A	≤ 30 mVpp	1.5% + 2 counts	1.5% + 2 counts	10 mV	1 mA	•	-	•	-	-	-	-		
1697B	200 W	40 V	5 A	≤ 30 mVpp	1.5% + 2 counts	1.5% + 2 counts	10 mV	1 mA	•	-	•	-	-	-	-		
9184B	200 W	100 V, 200 V	2 A, 1 A	≤ 1.5 mVrms / ≤ 15 mVpp	≤ 0.05% + 50 mV	≤ 0.1% + 1 mA	10 mV	0.1 mA	٠	0	0	о	0	0	0		
9183B	210 W	35 V, 70 V	6 A, 3 A	≤ 0.5 mVrms / ≤ 5 mVpp	≤ 0.05% + 10 mV	≤ 0.1% + 2 mA	2 mV	0.2 mA	٠	0	0	о	0	0	0		
9174B	210 W	35 V, 70 V x 2	3 A, 1.5 A x 2	≤ 0.5 mVrms / ≤ 5 mVpp	≤ 0.05% + 10 mV	≤ 0.1% + 1 mA	2 mV	0.1 mA	•	0	0	о	о	0	0		
9185B	210 W	400 V, 600 V	0.5 A, 0.35 A	≤ 4.5 mVrms / ≤ 45 mVpp	≤ 0.05% + 100 mV	≤ 0.1% + 0.1 mA	20 mV	0.01 mA	•	о	0	о	0	0	0		
1685B	300 W	60 V	5 A	≤ 50 mVpp	± 0.2% + 3 counts	± 0.2% + 3 counts	800 mV	10 mA	•	-	-	•	-	-	-		
9140	300 W	32 V x 3	8 A x 3	≤ 1 mVrms /≤5 mVpp	0.03% + 4 mV	0.1% + 5 mA	1 mV	1 mA	•	-	-	-	0	☆	0		
9141	300 W	60 V x 3	4 A x 3	≤ 2 mVrms / ≤ 10 mVpp	0.03% + 8 mV	0.1% + 3 mA	1 mV	1 mA	٠	-	-	-	0	☆	0		

"•" Standard "o" Optional

"☆" LXI-compliant

Programmable 320 W to 20 kW

	BK PR U 307/160.1.0	ECISION ® 10.000 U 1 = 4.000 F 000 U 0.000 Å 46W Programmable DC Power Se	XLN3640 Vert Es Inset Menu O vosty	1 2 3 9 1 200 4 5 6 7 80 1				80.000V 8.00	10.0 <u>0</u>	10A	Voltage Curren	4 00 F 7	Allers ; Allers		
Madal	D	Max	Max	Ripple &	Progra Accu	mming Iracy	Programming Resolution				aces	:es			
Model	Power	Voltage	Current	Noise	Voltage	Current	Voltage	Current	USB	RS232	RS485	Analog Control	GPIB	LAN	Rackn Ki
9103	320 W	42 V	20 A	≤ 8 mVrms / ≤ 80 mVpp	± 0.2% + 0.05	± 0.2% + 0.05	20 mV	10 mA	•	-	-	٠	-	-	-
9104	320 W	84 V	10 A	≤ 8 mVrms / ≤ 80 mVpp	± 0.2% + 0.05	± 0.2% + 0.05	20 mV	10 mA	•	-	-	٠	-	-	-
1688B	360 W	18 V	20 A	≤ 50 mVpp	± 0.2% + 3 counts	± 0.2% + 3 counts	800 mV	100 mA	•	-	-	٠	-	-	-
1687B	360 W	36 V	10 A	≤ 50 mVpp	± 0.2% + 3 counts	± 0.2% + 3 counts	800 mV	100 mA	•	-	-	٠	-	-	-
1902B	900 W	60 V	15 A	≤ 5 mVrms / ≤ 100 mVpp	± 0.2% + 3 counts	± 0.2% + 3 counts	800 mV	10 mA	•	-	-	٠	-	-	-
1900B	960 W	16 V	60 A	≤ 5 mVrms / ≤ 50 mVpp	± 0.2% + 3 counts	± 0.2% + 3 counts	800 mV	10 mA	•	-	-	٠	-	-	-
1901B	960 W	32 V	30 A	≤ 5 mVrms / ≤ 50 mVpp	± 0.2% + 3 counts	± 0.2% + 3 counts	800 mV	10 mA	•	-	-	٠	-	-	-
9115/B/-AT	1200 W	80 V	60 A	≤ 60 mVpp	0.02% + 30 mV	0.1% + 60 mA	1 mV	1 mA	•	•	•	٠	ο	-	•
9116/B	1200 W	150 V	30 A	≤ 60 mVpp	0.05% + 30 mV	0.2% + 30 mA	3 mV	1 mA	•	•	•	٠	о	-	•
XLN3640 (-GL)	1440 W	36 V	40 A	≤ 5 mVrms / ≤ 60 mVpp	0.05% + 10 mV	0.05% + 10 mA	1 mV	1 mA	•	-	•	٠	٠	•	0
XLN6024 (-GL)	1440 W	60 V	24 A	≤ 6 mVrms / ≤ 70 mVpp	0.05% + 15 mV	0.05% + 18 mA	1.5 mV	1 mA	•	-	•	٠	•	•	0
XLN8018 (-GL)	1440 W	80 V	18 A	≤ 7 mVrms / ≤ 80 mVpp	0.05% + 20 mV	0.05% + 7 mA	2 mV	1 mA	•	-	•	٠	•	•	0
XLN10014 (-GL)	1440 W	100 V	14.4 A	≤ 8 mVrms / ≤ 80 mVpp	0.05% + 25 mV	0.05% + 6 mA	2.5 mV	1 mA	•	-	•	٠	•	•	0
XLN15010 (-GL)	1560 W	150 V	10.4 A	≤ 10 mVrms / ≤ 100 mVpp	0.05% + 75 mV	0.1% + 30 mA	10 mV	1 mA	•	-	•	٠	•	•	о
XLN30052 (-GL)	1560 W	300 V	5.2 A	≤ 25 mVrms / ≤ 150 mVpp	0.05% + 150 mV	0.1% + 15.6 mA	10 mV	1 mA	•	-	•	٠	•	•	о
XLN60026 (-GL)	1560 W	600 V	2.6 A	≤ 50 mVrms / ≤ 300 mVpp	0.05% + 300 mV	0.1% + 7.8 mA	10 mV	1 mA	•	-	•	٠	•	•	о
PVS60085MR	3000 W	600 V	8.5 A	≤ 100 mVrms / ≤ 500 mVpp	400 mV	0.03% + 3.5 mA	10 mV	0.2 mA	•	-	•	٠	•	•	0
MR3K160120	3000 W	160 V	120 A	≤ 48 mVrms / ≤ 120 mVpp	160 mV	360 mA	10 mV	7.5 mA	•	•	•	٠	•	☆	о
MR160120	5000 W	160 V	120 A	≤ 48 mVrms / ≤ 160 mVpp	160 mV	360 mA	10 mV	7.5 mA	•	•	•	٠	•	☆	о
MR25080	5000 W	250 V	80 A	≤ 85 mVrms / ≤ 500 mVpp	100 mV	60 mA	10 mV	5 mA	•	•	•	٠	•	☆	о
MR50040	5000 W	500 V	40 A	≤ 75 mVrms / ≤ 600 mVpp	300 mV	50 mA	20 mV	2 mA	•	•	•	•	•	☆	о
MR100020	5000 W	1000 V	20 A	≤ 120 mVrms / ≤ 700 mVpp	500 mV	25 mA	100 mV	1 mA	•	•	•	٠	٠	☆	0
PVS10005	5000 W	1000 V	5 A	≤ 100 mVrms / ≤ 600 mVpp	700 mV	0.03% + 2 mA	0.1 V	0.1 mA	•	-	•	٠	•	•	о
PVS60085	5100 W	600 V	8.5 A	≤ 100 mVrms / ≤ 500 mVpp	400 mV	0.03% + 3.5 mA	10 mV	0.2 mA	•	-	•	٠	•	•	о
HPS20K800	20 kW	800 V	25 A	≤ 150 mVrms / ≤ 350 mVpp	800 mV	50 mA	0.1 V	1 mA	-	•	-	٠	-	•	-
HPS20K1500	20 kW	1500 V	13.4 A	≤ 200 mVrms / ≤ 900 mVpp	1.5 V	30 mA	0.1 V	1 mA	-	•	-	•	-	•	-

"•" Standard "o" Optional "☆" LXI-compliant

Dual and Triple Output

Dual & triple output power supplies give users the flexibility to configure multiple channels to meet their application needs. Each output can be used independently, or connected in series, or parallel with other channels to increase voltage or current. This also allows for various output configurations such as positive and negative outputs for powering bipolar circuits and devices.

Common Features & Benefits

- Independent, floating and electrically isolated outputs
- Series or parallel operation to produce higher voltage or current output
- Display and adjust voltage and current settings for multiple channels simultaneously





Bipolar output configuration The independent and isolated outputs can be used to create positive and negative outputs between channels 1 and 2. This feature is useful for powering bipolar circuits and devices.

Madal	Dower	CH1		C	H2	C	13	Standard Interfaces	
Mouel	ruwei	Voltage	Current	Voltage	Current	Voltage	Current	Stanuaru miterraces	
1652	44 W	24 V	500 mA	24 V	500 mA	5 V	4 A	N/A	
BCS6401	90 W	± 15 V	5 A	15 V	5 A	-	-	USB, LAN	
1760A	92 W	30 V	2 A	30 V	2 A	6.5 V	5 A	N/A	
1670A	98 W	30 V	3 A	12 V	500 mA	5 V	500 mA	N/A	
1671A	158 W	30 V	5 A	12 V	500 mA	5 V	500 mA	N/A	
9129B	195 W	30 V	3 A	30 V	3 A	5 V	3 A	USB (virtual COM via included USB to TTL adapter)	
9130C	195 W	30 V	3 A	30 V	3 A	5 V	3 A	RS232, USB	
9173B	200 W	10 V / 20 V	10 A / 5 A	10 V / 20 V	10 A / 5 A	-	-	USB (RS232, RS485, analog control, GPIB, LAN, digital I/O)-opt.	
1672	207 W	32 V	3 A	32 V	3 A	5 V	3 A	N/A	
9174B	210 W	35 V / 70 V	3 A / 1.5 A	35 V / 70 V	3 A / 1.5 A	-	-	USB (RS232, RS485, analog control, GPIB, LAN, digital I/O)-opt.	
1761	242 W	35 V	3 A	35 V	3 A	6.5 V	5 A	N/A	
1762	266 W	60 V	2 A	60 V	2 A	6.5 V	5 A	N/A	
9131C	375 W	30 V	6 A	30 V	6 A	5 V	3 A	RS232, USB	
9132C	375 W	60 V	3 A	60 V	3 A	5 V	3 A	RS232, USB	
9140	300 W	32 V	8 A	32 V	8 A	32 V	8 A	USB, LAN, GPIB-opt.	
9141	300 W	60 V	4 A	60 V	4 A	60 V	4 A	USB, LAN, GPIB-opt.	
1673	399 W	32 V	6 A	32 V	6 A	5 V	3 A	N/A	

Basic and Education



These DC power supplies offer the best in simplicity with their easy-to-use functions. All supplies can be controlled from the front panel only, and many models come with analog or digital meters. Ideal for students, hobbyists, service and repair personnel, and other users looking for low-cost options without all the extras.

Model	Max Power	Voltage Range	Current Range	No. of Outputs	Mode	Display (Meter)
1621A	90 W	0 to 18 V	0 to 5 A	1	CV/CC	Dual 3-digit LED
1623A	90 W	0 to 60 V	0 to 1.5 A	1	CV/CC	Dual 3-digit LED
1627A	90 W	0 to 30 V	0 to 3 A	1	CV/CC	Dual 3-digit LED
1735A	90 W	0 to 30 V	0 to 3 A	1	CV/CC	Dual 4-digit LED
1760A	92 W	0 to 30 V (A&B), 4 to 6.5 V (C)	0 to 2 A (A&B), 5 A (C)	3	CV/CC	Dual 4-digit LED
1670A	98.5 W	0 to 30 V (A), 12 V (B), 5 V (C)	0 to 3 A (A), 500 mA (B), 500 mA (C)	3	CV/CC	Dual 3-digit LCD
9110	100 W	0 to 60 V	0 to 5 A	1	Multi-Ranging CV/CC	Dual 4-digit LED
1550	108 W	1 to 36 V	0 to 3 A	1	CV/CC	LCD
1715A	120 W	0 to 60 V	0 to 2 A	1	CV/CC	Dual 4-digit LED
1671A	158.5 W	0 to 30 V (A), 12 V (B), 5 V (C)	0 to 5 A (A), 500 mA (B), 500 mA (C)	3	CV/CC	Dual 3-digit LCD
9111	180 W	0 to 60 V	0 to 8 A	1	Multi-Ranging CV/CC	Dual 4-digit LED
1667	198 W	0 to 60 V	0 to 3.3 A	1	CV/CC	Dual 3-digit LED
1665	200 W	0 to 20 V	0 to 10 A	1	CV/CC	Dual 3 1/2-digit LED
1666	200 W	0 to 40 V	0 to 5 A	1	CV/CC	Dual 3-digit LED
1672	207 W	0 to 32 V (A&B), 5 V (C)	0 to 3 A (A&B), 3 A (C)	3	CV/CC	Quad 3-digit LED
1743B	210 W	35 V	0.25	1	CV/CC	Dual 4-digit LED
1761	242 W	0 to 35 V (A&B), 2 to 6.5 V (C)	0 to 3 A (A&B), 5 A (C)	3	CV/CC	Dual 4-digit LED
1762	266 W	0 to 60 V (A&B), 2 to 6.5 V (C)	0 to 2 A (A&B), 5 A (C)	3	CV/CC	Dual 4-digit LED
1745A	350 W	35 V	10 A	1	CV/CC	Dual 4-digit LED
1673	399 W	0 to 32 V (A&B), 5 V (C)	0 to 6 A (A&B), 3 A (C)	3	CV/CC	Quad 3-digit LED
1692	600 W	15 V	40 A	1	CV	Dual 3-digit LED
1693	900 W	15 V	60 A	1	CV	Dual 3-digit LED
1694	900 W	30 V	30 A	1	CV	Dual 3-digit LED

CV = Constant Voltage

CC = Constant Current

AC Power Sources





Built-in PLD and dimmer

Voltage and frequency sweep

Pre-compliance testing for

simulation according to

IEC61000-4-11 / 4-14 / 4-2

voltage dips and frequency

simulation

mode

The 9800/B Series offers programmable functions and is suitable for evaluating transformers, TRIACs, SCRs, and passive components as well as production, R&D, service, and pre-compliance testing.

9800/B Series Features

- 0 to 300 V, low distortion AC source with models delivering up to 1500 VA, 12 Arms/48 Apeak
- Displays Vrms, Irms, Ipeak, frequency, PF, apparent power, true power, and elapsed output time
- Adjustable phase angle control

Power line disturbance (PLD) simulator

3000 VA

0 to 300 V

The PLD simulator is an extended feature of list mode that provides the user with more control over the disturbance insertion into the waveform. This can be useful for evaluating a product's immunity performance. For instance, a user could produce common waveform disturbances like surge, sag, spikes, and dropouts at user-defined locations on the waveform.



PLD Waveform



The 9830B Series programmable AC power sources provide high performance and low total harmonic distortion in a 3U form factor. The addition of positive and negative DC offset voltages expands the AC capabilities to operate in DC and AC+DC output coupling modes.

9830B Series Features

- AC, DC and AC+DC power source
- Low total harmonic distortion meets the IEC 61000-3-2 standard
- 0.98 power factor at AC input stage

3-Phase AC power

Connect multiple 9830B series models for split, 2 and 3 phase testing.

- Supports 3-phase Y configuration
- Full 0° to 360° phase control
- 45 Hz to 600 Hz operating frequency
- Up to 2000 VA / 3000 VA per phase

- Comprehensive measurements Vrms, Arms, Vdc, +Apk, -Apk, inrush current, Hz, power factor, apparent power, reactive power, true power, and crest factor
- 3-Phase capability using 3 AC sources and the 3-Phase kit (TL983P-KIT)



list mode, 3-phase

capable

GPÍB, LAN

Model	Description	Max Power	Max Voltage (rms)	Max Current (rms)	Frequency	AC Input	Interfaces	Other Features
1655A	Isolated Variable AC Power Supply	150 VA	0 to 150 V	3 A (continuous), 4 A (intermittent)	-	120 VAC, 60 Hz	-	Built-in soldering temperature control and expanded leakage scale
1604A	Isolation Transformer	155 VA	117 to 124 V	1.25 A	-	110/220 VAC ±10%, 47 to 63 Hz	-	-
9801/B	Programmable AC Power Source	300 VA	0 to 300 V	3 A at 150 V, 1.5 A at 300 V	45 Hz to 500 Hz	110/220 VAC ±10%, 47 to 63 Hz	USB, RS232, LAN, GPIB-opt.	PLD simulator, list mode, dimmer mode, and sweep function
9812	Programmable AC Power Source	500 VA	0 to 300 V	4.2 A	45 Hz to 500 Hz	115/230 VAC ± 15%, 47 to 63 Hz	USB, RS232, Analog	List mode, dimmer mode, surge mode
9803/B	Programmable AC Power Source	750 VA	0 to 300 V	6 A at 150 V, 3 A at 300 V	45 Hz to 500 Hz	120 VAC, 60 Hz	USB, RS232, LAN, GPIB-opt.	PLD simulator, list mode, dimmer mode, and sweep function
9814	Programmable AC Power Source	1000 VA	0 to 300 V	8.4 A	45 Hz to 500 Hz	115/230 VAC ± 15%, 47 to 63 Hz	USB, RS232, Analog	List mode, dimmer mode, surge mode
9805/B	Programmable AC Power Source	1500 VA	0 to 300 V	12 A at 150 V, 6 A at 300 V	45 Hz to 500 Hz	120 VAC, 60 Hz	USB, RS232, LAN, GPIB-opt.	PLD simulator, list mode, dimmer mode, and sweep function
9832B	Programmable AC Power Source	2000 VA	0 to 300 V	0 to 20 A	45 Hz to 1200 Hz	190 V to 250 V 47 Hz to 63 Hz	USB, RS232, GPIB, LAN	PLD simulator, list mode , 3-phase capable
00220	Programmable	2000.1/4	0 +- 200 1/	0.4-20.4	45 Hz to	190 V to 250 V	USB, RS232,	PLD simulator,

0 to 30 A

1200 Hz

47 Hz to 63 Hz

9833B

AC Power Source

Solar, Automotive, and ATE Applications

Solar Array Simulation (SAS) software

The I-V curve of solar cells can be influenced by various weather conditions such as clouds or rain. The SAS control software allows users to set I-V parameters to simulate static and dynamic MPPT efficiencies under different conditions.

- Variety of input parameters (Voc/Isc/Vmp/Imp/FF/FFv/FFi)
- Monitors real-time voltage, current, power, MPPT efficiency, and average MPPT efficiency
- Simulate I-V curve under different weather conditions during a day
- User-definable irradiance profile
- Generate an I-V curve with up to 1024 data points
- Curve generation based on Sandia Labs and EN50530 test standards



Compatible with PVS Series and MR Series power supply models

Built-in simulations compliant to automotive test standards

In order to ensure electronic systems used in a vehicle are able to function in an automotive environment, automotive component manufacturers test electronic modules to industry standards. The 9115B-AT provides automotive power test waveforms compliant to



DIN 40839 and ISO 16750-2 standards that can simulate common test conditions for electrical and electronic devices installed in automobiles.



Modular System DC Power Supplies

The MPS Series Modular System DC Power Supplies provide up to four output channels and 1200 W in a compact 1U form factor. Select from eight modules with various voltage and current ratings to create a 1 to 4 channel DC power supply ideal for ATE system applications.



Configure for your power requirements



About B&K Precision

For more than 70 years, B&K Precision has provided reliable and value-priced test and measurement instruments worldwide.

B&K Precision is headquartered Yorba Linda, California, with development, sales and service subsidiaries located in Europe and Asia. Our European customers are most familiar with B&K Precision through Sefram, our subsidiary located in St. Etienne, France, from which we serve our customers in Europe, the Middle East, and Africa. Engineers in Asia know us through our B&K Precision Taiwan subsidiary. Our office in Taipei provides sales, service and support to our customers in Asia. Our independent service centers in Singapore and Brazil service customers in Singapore, Malaysia, Vietnam, Indonesia and South America respectively.



Additional Resources

Video Library

View product overviews, demonstrations, and application videos in English, Spanish, and Portuguese. https://www.youtube.com/user/ BKPrecisionVideos/videos



Knowledge Base

Search and find answers to frequently asked questions, plus a wealth of resources: how-to guides, technical notes and other articles.



https://bkprecision.force.com/desk/s/