

LABKON P Series

Laboratory Power Supplies

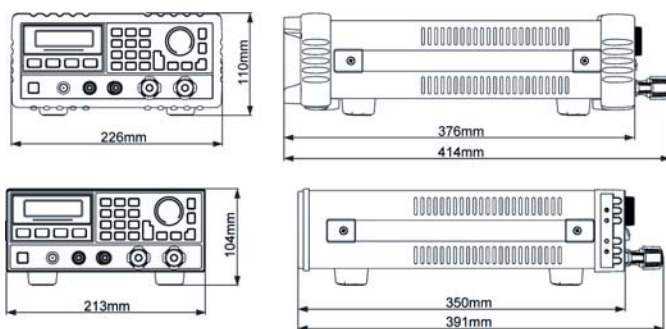
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- Power: 500 W or 800 W, respectively
- Voltage up to 120 V, current up to 22.5 A
- Modes: CV and CC, automatic switching
- Voltage and current continuously adjustable from 0 up to nominal output
- Several parameter groups (instrument settings) can be saved and retrieved.
- Floating output / no grounding
- High efficiency
- Safe DC isolation
- Output ON/OFF
- Supports SCPI commands
- Manually programmable via keyboard and rotary encoder
- Multifunctional LCD display
- Protective circuits, e. g. overvoltage protection
- Sense functionality
- Benchtop unit, can be installed into 19" rack
- Rugged, compact and easy to handle
- RS232 interface, optionally available with GPIB (IEEE-488) and USB
- Calibration (adjustment) function



Mechanical Design

Dimensions



Weight 5.5 kg

Standard Equipment

- 1 Benchtop device
- 1 Protective rubber housing
- 1 Mains power cable (earthing contact)
- 1 Safety instructions
- 1 CD-ROM with operating instructions in German and English

View

Rear panel with protective rubber housing



Connection

Input voltage	LABKON P500: 100 V ... 240 V AC, 47 ... 63 Hz, max. 750 VA
	LABKON P800: 180 V ... 265 V AC, 47 ... 63 Hz, max. 1050 VA

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Technical Characteristics

	LABKON P500 35 V / 14.5 A	LABKON P500 80 V / 6.5 A	LABKON P500 120 V / 4.2 A	LABKON P800 35 V / 22.5 A	LABKON P800 80 V / 10 A	LABKON P800 120 V / 6.5 A
Output Ratings						
Voltage	0 ... 35 V	0 ... 80 V	0 ... 120 V	0 ... 35 V	0 ... 80 V	0 ... 120 V
Current	0 ... 14.5 A	0 ... 6.5 A	0 ... 4.2 A	0 ... 22.5 A	0 ... 10 A	0 ... 6.5 A
Ripple and Noise (20 Hz to 20 MHz)						
Voltage (rms)	< 5 mVrms	< 8 mVrms	< 15 mVrms	< 10 mVrms	< 16 mVrms	< 16 mVrms
Voltage (peak-to-peak)	< 10 mVp-p	< 14 mVp-p	< 80 mVp-p	< 20 mVp-p	< 25 mVp-p	< 80 mVp-p
Current	< 8 mArms	< 6 mArms	< 6 mArms	< 8 mArms	< 6 mArms	< 10 mArms
Common Mode Current	< 1.5 mArms	< 1.5 mArms	< 1.5 mArms	< 1.5 mArms	< 1.5 mArms	< 1.5 mArms
Load Regulation (static)						
Voltage	5 mV	10 mV	10 mV	3 mV	3 mV	10 mV
Current	3 mA	2 mA	1 mA	2 mA	2 mA	2 mA
Line Regulation						
Voltage	5 mV	10 mV	10 mV	2 mV	2 mV	10 mV
Current	3 A	2 mA	1 mA	1 A	1 mA	1 mA
Rise and Fall Time 0 ... 100 % (measured from 10 ... 90 %)						
Full load up	50 ms	50 ms	60 ms	50 ms	50 ms	60 ms
Full load down	50 ms	50 ms	60 ms	50 ms	50 ms	60 ms
No load up	50 ms	50 ms	60 ms	50 ms	50 ms	60 ms
No load down	200 ms	300 ms	300 ms	200 ms	300 ms	300 ms
Programming Accuracy						
Voltage	0.15 % + 5 mV	0.03 % + 10 mV	0.03 % + 15 mV	0.03 % + 8 mV	0.03 % + 10 mV	0.03 % + 15 mV
Current	0.50 % + 6 mA	0.50 % + 3 mA	0.50 % + 10 mA	0.50 % + 6 mA	0.50 % + 5 mA	0.50 % + 12 mA
Readback Accuracy						
Voltage	0.15 % + 5 mV	0.02 % + 5 mV	0.02 % + 8 mV	0.02 % + 2 mV	0.02 % + 5 mV	0.02 % + 8 mV
Current	0.50 % + 5 mA	0.50 % + 5 mA	0.50 % + 5 mA	0.20 % + 5 mA	0.50 % + 5 mA	0.50 % + 12 mA
Programming Resolution						
Voltage	1 mV	1 mV	1 mV (@ 0...99.999 V) 10 mV (@ 100...120 V)	1 mV	1 mV	1 mV (@ 0...99.999 V) 10 mV (@ 100...120 V)
Current	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA
Readback Resolution						
Voltage	1 mV	1 mV	2 mV	1 mV	1 mV	2 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA
Measuring resolution						
Voltage	1 mV	1 mV	1 mV (@ 0...99.999 V) 10 mV (@ 100...120 V)	1 mV	2 mV	1 mV (@ 0...99.999 V) 10 mV (@ 100...120 V)
Current	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA

Ambient Conditions

Operating Temperature	0 °C ... 40 °C
Humidity	max. 80 %

Order Information

Description	Type	Article n°
LABKON P500 35 V 14.5 A laboratory power supply	LABKON P500 35/14	K148A
LABKON P500 80 V 6.5 A laboratory power supply	LABKON P500 80/6	K149A
LABKON P500 120 V 4.2 A laboratory power supply	LABKON P500 120/4	K150A
LABKON P800 35 V 22.5 A laboratory power supply	LABKON P800 35/22	K158A
LABKON P800 80 V 10 A laboratory power supply	LABKON P800 80/10	K159A
LABKON P800 120 V 6.5 A laboratory power supply	LABKON P800 120/6	K160A
Option GPIB (IEEE-488) interface for LABKON Series	GPIB-IEEE-488	K890A
Option USB interface for LABKON Series	USB-Interface	K891A
Installation kit for 19" rack	Installation kit SPL/LABKON	Z990A

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