

ÖÔÅ[ ^ I&^ ÁPÒËSÓÓJT Ú  
1,2 – 2,4 kW

**HEIDEN**  
COMPETENCE IN POWER



Picture shows a 2,4 kW Version

( 19" x 1 HE x 440 mm

## OVERVIEW

- Efficiency up to 94 %
- Compact Design
- Active and Parallel connectable
- Easiest operation via front panel
- Constant Current, Voltage, Resistance and Power Operation
- Randomly programmable Memory Locations for U/I waves
- UI, UIP, UIR Mode, Simulation of PV-Arrays
- Script Control: process programming and booting from memory card
- Creating user defined output characteristics via memory card or digital interface
- Digital Interfaces IEEE 488, RS232/485, USB and LAN (optional)
- Galvanically isolated Analogue Interface 0 – 5 V or 0 – 10 V (user selectable; optional)
- Storable U/I wave forms (e.g. for PV simulation and sequential control)
- Graphical Display
- Special version on request
- Datalog function: operation values can be saved in an adjustable interval to a memory card
- Script operation in combination with Datalog function allows an independent stand-alone test field setup
- Umax and Imax randomly selectable to limit maximum output voltage and current

## PRODUCT EXAMPLES

Type	Power W	Voltage V	Current A	Dimensions
HE-LAB/SMP 115	1.200	0 – 15	0 – 80	19" x 1 HE x 440 mm
HE-LAB/SMP 135	1.200	0 – 35	0 – 35	19" x 1 HE x 440 mm
HE-LAB/SMP 145	1.200	0 – 45	0 – 30	19" x 1 HE x 440 mm
HE-LAB/SMP 170	1.200	0 – 70	0 – 20	19" x 1 HE x 440 mm
HE-LAB/SMP 1150	1.200	0 – 150	0 – 8	19" x 1 HE x 440 mm
HE-LAB/SMP 1300	1.200	0 – 300	0 – 4	19" x 1 HE x 440 mm
HE-LAB/SMP 1600	1.200	0 – 600	0 – 2	19" x 1 HE x 440 mm
HE-LAB/SMP 215	2.400	0 – 15	0 – 160	19" x 1 HE x 440 mm
HE-LAB/SMP 235	2.400	0 – 35	0 – 105	19" x 1 HE x 440 mm
HE-LAB/SMP 245	2.400	0 – 45	0 – 90	19" x 1 HE x 440 mm
HE-LAB/SMP 270	2.400	0 – 70	0 – 60	19" x 1 HE x 440 mm
HE-LAB/SMP 2150	2.400	0 – 150	0 – 24	19" x 1 HE x 440 mm
HE-LAB/SMP 2300	2.400	0 – 300	0 – 12	19" x 1 HE x 440 mm
HE-LAB/SMP 2600	2.400	0 – 600	0 – 6	19" x 1 HE x 440 mm

## OPTIONS

Appendix	Description
..AVI	Input 90 – 264 VAC
..I115	Input 110 – 126 VAC
..J230	Input 230 / 207 – 253 VAC
..3P208	Input 3 x 208 / 187 – 229 VAC
..3P400	Input 3 x 400 / 360 – 440 VAC
..3P440	Input 3 x 440 / 396 – 484 VAC
..3P480	Input 3 x 480 / 432 – 528 VAC
..400Hz	Input 400 Hz
..DC	Input 250...750 VDC
..ATE	Only ATE mode, no frontpanel
..AT15/10	Isolated analogue interface 0 – 5 / 0 – 10 VDC set and monitor
..LT	Interface IEEE488
..LTRS485	Interface RS485
..LTRS232	Interface RS232
..LAN	Interface LAN
..USB	Interface USB
..KFZ12	Car starting curve 12 VDC
..KFZ24	Car starting curve 24 VDC
..OPT	Output characteristics
..SD	SD card slot
..M-S	Master-Slave Option for max. 20 kW

## TECHNICAL DATAS

### Input Voltage Specification

Input voltage range	1,2 kW 90 – 264 VAC / PFC   2,4 kW 230 VAC +/-10 % / PFC
Input frequency	47 – 63 Hz

### EMC and Safety Standards

Safety standard	EN 60950
Emission	EN 61000-6-4:2007
Immunity	EN 61000-6-2:2005
Measurement, control- and laboratory equipment	EN 61010-1:2006

### Output Specifications

Static Voltage Regulation	+/-0.05 % + 2 mV
Static Current Regulation	+/-0.1 % + 2 mA
Dynamic Load Regulation	< 2 ms (typ.)
Ripple	< 0.2 % (typ.)
Stability	+/-0.05 %
Programming Accuracy (Vout)	+/-0.05 % + 2 mV
Isolation	3.000 V
Over Voltage Protection	0 – 120 % Vmax
Circuit Protection	OC / OV / OT / OP
Line Regulation	< +/-0.1 % + 2 mV
Static Load Regulation	< +/-0.1 % + 2 mV

#### **Programming & Controls**

Output Control & Monitoring	Front panel and/or optional Analog 0 – +5V/+10V isolated / Digital 12 bit: RS232, RS485, IEEE488, LAN, USB, SD card
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#### **Ambient Conditions**

Cooling	Fans
Operating temperature	0 – 50°C
Storage temperature	-20 – 70°C
Humidity	< 80%
Operating height	< 2.000 m
Vibration	10 – 55 Hz / 1 min / 2G XYZ
Shock	< 20 G
Weight	1,2 kW 7 kg   2,4 kW 7,6 kg

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