DC Sources LAB SMP
750 – 2.400 W

Picture shows a 2,4 kW Version

19" x 1 U x 440 mm

OVERVIEW

- 750 W to 2.4 kW
- Output voltages up to 1,200 V
- Output currents up to 160 A
- Quiet operation, ensuring that it is pleasant to work within the vicinity of the unit
- Very easy to control via front panel
- Information via graphic display
- Constant voltage, current, resistance, power operation and simulation of PV arrays
- Create any type of voltage or current curve via memory card or digital interface (sequential operation)
- Script operation, in conjunction with the Datalog function, enables an independent stand-alone test field to be set up
- Standard integrated ATI 5/10 galvanically isolated analogue interface: 0 – 5 V or 0 – 10 V (user selectable) and RS232, soft interlock
- Filter functions which can be adjusted for analogue interface
- Digital interfaces IEEE488, RS485, USB and LAN (optional)
- SD card slot (optional)
- Datalog function: Current operating values are saved to the memory card at adjustable time intervals, SD card (optional)
- Voltage rise time and current rise time (U and I slopes) are adjustable
- U_{max} and I_{max} can be set by the user in order to limit output voltage or output current
- A switch-off time can be set for the unit once the start button has been pressed
- Create U/I output characteristics which can be saved (e.g. for PV-Sim, shading)
- "High speed" optional
  The secondary rise and fall time for the DC output voltage is reduced by a factor of 10 compared to standard times, on average.
- Autorange optional down to 33%
- OVP, OTP, UVP and OCP protective functions
- Special versions available on request

PRODUCT EXAMPLES

Type	Power W	Voltage V	Current A	Dimensions
LAB/SMP 715	750	0 – 15	0 – 50	19" x 1 U x 440 mm
LAB/SMP 735	750	0 – 35	0 – 22	19" x 1 U x 440 mm
LAB/SMP 745	750	0 – 45	0 – 17	19" x 1 U x 440 mm
LAB/SMP 770	750	0 – 70	0 – 11	19" x 1 U x 440 mm
LAB/SMP 7150	750	0 – 150	0 – 5	19" x 1 U x 440 mm
LAB/SMP 7300	750	0 – 300	0 – 2,5	19" x 1 U x 440 mm
LAB/SMP 7600	750	0 – 600	0 – 1,2	19" x 1 U x 440 mm
LAB/SMP 71200	750	0 – 1.200	0 – 0,6	19" x 1 U x 440 mm
LAB/SMP 115	1.200	0 – 15	0 – 80	19" x 1 U x 440 mm
LAB/SMP 135	1.200	0 – 35	0 – 35	19" x 1 U x 440 mm
LAB/SMP 145	1.200	0 – 45	0 – 30	19" x 1 U x 440 mm
LAB/SMP 170	1.200	0 – 70	0 – 20	19" x 1 U x 440 mm
LAB/SMP 1150	1.200	0 – 150	0 – 8	19" x 1 U x 440 mm
LAB/SMP 1300	1.200	0 – 300	0 – 4	19" x 1 U x 440 mm
LAB/SMP 1600	1.200	0 – 600	0 – 2	19" x 1 U x 440 mm
LAB/SMP 11200	1.200	0 – 1.200	0 – 1	19" x 1 U x 440 mm
LAB/SMP 215	2.400	0 – 15	0 – 160	19" x 2 U x 440 mm
LAB/SMP 235	2.400	0 – 35	0 – 68	19" x 1 U x 440 mm
LAB/SMP 245	2.400	0 – 45	0 – 53	19" x 1 U x 440 mm
LAB/SMP 270	2.400	0 – 70	0 – 34	19" x 1 U x 440 mm
LAB/SMP 2150	2.400	0 – 150	0 – 16	19" x 1 U x 440 mm
LAB/SMP 2300	2.400	0 – 300	0 – 8	19" x 1 U x 440 mm
LAB/SMP 2600	2.400	0 – 600	0 – 4	19" x 1 U x 440 mm
LAB/SMP 21200	2.400	0 – 1.200	0 – 2	19" x 2 U x 440 mm

MODEL NUMBER DESCRIPTION

LAB /	SMP	1150 /	230 /	LAN	Kfz 12	Mod
DC-Source	Series	Output power / output voltage	Input voltage	Interface option	Process option	Modification

OPTIONS

Appendix	Description
../230	230 / 207 – 253 VAC Input
../3P208	3 x 208 / 187 – 229 VAC Input
../3P400	3 x 400 / 360 – 440 VAC Input
../3P440	3 x 440 / 396 – 484 VAC Input
../3P480	3 x 480 / 432 – 528 VAC Input
../400Hz	400 Hz Input
../DC	250...750 VDC Input
../ATE	Without Manual Operation
../LT IEEE	IEEE488 Interface
../LTRS485	RS 485 Interface
../LAN	LAN Interface
../USB	USB Interface
../KFZ12	Preselected Start-up Curve 12 V
../KFZ24	Preselected Start-up Curve 24 V
../OPT	Predefined Output characteristic
../SD	SD Card Slot

TECHNICAL DATAS

Input Voltage Specifications

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

Standard Specifications

Safety standard	EN 61010-1: 2010
EMC	EN 61326-1: 2013
RoHS	EN 50581: 2012

Output Specifications

Static Voltage Regulation	+/-0.05 % + 2 mV
Static Current Regulation	+/-0.1 % + 2 mA
Dynamic Load Regulation	< 1 – 3 ms (typ.)
Ripple	< 0.2 % (typ.)
Stability	+/-0.05 %
Accuracy of full scale (Vout)	+/-0.2 %
Accuracy of full scale (Cout)	+/-0.5 %
Isolation	3.000 V
Over Voltage Protection	0 – 120 % Vmax
Cuircuit Protection	OC / OV / OT / OP
Line Regulation	< +/-0.1 % + 2 mV

Programming & Controls

Output Control & Monitoring	Front panel and/or optional analog 0 – +5 V / +10 V isolated Digital 12 bit: RS 232, RS 485, IEEE488, LAN, USB, SD card

Ambient Conditions

Cooling	Fans
Operating temperature	0 – 50°C
Storage temperature	-20 – 70°C
Humidity	< 80%
Operating height	< 2.000 m
Weight	1,2 kW 7 kg	2,4 kW 7,6 kg