

## EAC-SP 1-Phase AC Power Sources 250 – 12.000 VA



### OVERVIEW

- Simulation of single-phase networks
- AC and DC operation
- 250 – 12.000 VA power output
- 0 – 700 V AC / 1.000 V DC output voltage per phase
- 1 – 2.000 Hz variable frequency (sine, square, triangle)
- Currents up to 600 A per phase
- Graphical display
- Measuring of: voltage, current, average and peak current, effective power, idle power, apparent power, power factor, crest factor
- Constant voltage and constant current modes
- Free memory space to store user programmed curves via optional SD card slot
- Pre-loaded test procedure according to EN61000-4-11 (adjustable via front panel)
- External oscillator input  $\pm 10$  V with adjustable time delay up to 70 mS
- Digital interface IEEE, RS-232/485, USB, LAN
- Galvanically isolated 0 – 5 V or 0 – 10 V analogue interface
- Script control: process programming and booting from memory card
- Creation of user defined waveforms and programming via memory card or digital interface
- Data logging function: output values can be saved at adjustable time intervals to a memory card
- Script operation in combination with data logging function provides and stand-alone testing
- Sync input synchronizes the device with external sources
- Sync output triggers external measurement instruments or similar
- 'Brown-out' simulation where output voltage drops for a determined amount of half periods
- Output voltage for a determined amount of time
- Special versions available on request

## PRODUCT EXAMPLES

Type	Power VA	Voltage V AC / V DC	Effective Current A	Dimensions
EAC/SP 250	250	0 – 300 / 0 – 425	0 – 3	19" x 3U x 620 mm
EAC/SP 500	500	0 – 300 / 0 – 425	0 – 6	19" x 3U x 620 mm
EAC/SP 1500	1.500	0 – 300 / 0 – 425	0 – 10	19" x 3U x 620 mm
EAC/SP 2000	2.000	0 – 300 / 0 – 425	0 – 16	19" x 6U x 620 mm
EAC/SP 3000	3.000	0 – 300 / 0 – 425	0 – 20	19" x 6U x 620 mm
EAC/SP 4500	4.500	0 – 300 / 0 – 425	0 – 30	19" x 9U x 620 mm
EAC/SP 5000	5.000	0 – 300 / 0 – 425	0 – 35	19" x 9U x 620 mm
EAC/SP 6000	6.000	0 – 300 / 0 – 425	0 – 40	19" x 9U x 620 mm
EAC/SP 7500	7.500	0 – 300 / 0 – 425	0 – 50	19" x 9U x 620 mm
EAC/SP 8000	8.000	0 – 300 / 0 – 425	0 – 60	19" x 12U x 620 mm
EAC/SP 9000	9.000	0 – 300 / 0 – 425	0 – 70	19" x 12U x 620 mm
EAC/SP 10500	10.500	0 – 300 / 0 – 425	0 – 80	19" x 12U x 620 mm
EAC/SP 12000	12.000	0 – 300 / 0 – 425	0 – 90	19" x 18U x 620 mm

## OPTIONS

Appendix	Description
../230	Input 230 / 207 – 253 V AC
../400	Input 400 / 360 – 440 V AC
../3P208	Input 3 x 208 / 187 – 229 V AC
../3P400	Input 3 x 400 / 360 – 440 V AC
../3P480	Input 3 x 480 / 432 – 528 V AC
../V500 % I <sub>max</sub>	Extended voltage range 0 – 500 V AC / 0 – 700 V DC -40
../V700 50 % I <sub>max</sub>	Extended voltage range 0 – 700 V AC / 0 – 1.000 V DC -
../F1000	Extended frequency range 1 – 1.000 Hz
../F2000	Extended frequency range 1 – 2.000 Hz
../LT	Interface IEEE 488
../LTRS485	Interface RS-485
../LTRS232	Interface RS-232
../LAN	Interface LAN
../USB	Interface USB
../ATI 5	Galvanically isolated analogue interface 0 – 5 V
../ATI 10	Galvanically isolated analogue interface 0 – 10 V
../EXT/OSZ	OSZ external oscillator input
../SD	SD card slot
../SYNC A or similar (optional)	Sync output for triggering external measurement devices or similar (optional)
../SYNC E (optional)	Sync input for synchronization with external sources
../INTLOCK	Interlock input / safety shutdown
../DIP of half periods	Disengageable output voltage during a specific number of half periods  (digital interface required)
../GATE	Engageable output voltage during a specific amount of time  (digital interface required)
../APuls	Adjustable puls sequence (digital interface required)
../LoadR	Load reverse energy recovery
../LoadLR	Load energy recovery / regeneration in development

## TECHNICAL DATA

### Input Voltage Specification

Input voltage range	230 V AC / 400 V AC / 3 x 208 V AC / 3 x 400 V AC / 3 x 480 V AC $\pm$ 10 %
Input frequency	47 – 63 Hz

### Output Specification

Grid regulation	0,10 %
Load control	0,10 %
Distortion Pmax	0,15 %
Programming accuracy AC voltage	100 mV
Programming accuracy DC voltage	100 mV
Programming accuracy < 10 A	1 mA
Effective constant current $\geq$ 10 A	10 mA
Programming accuracy Activation phase	0,1°
Programming accuracy Frequency	0,1 Hz
Frequency standard	0 – 500 Hz
External oscillator input	0 – 10 V / 1 kHz
Resolution, Measurement, Effective voltage, DC voltage, Peak voltage	100 mV
Resolution, Measurement <10 A	1 mA
Effective current, DC current Peak current $\geq$ 10 A	10 mA
Resolution, Measurement < 10 A	10 mW
Active power $\geq$ 10 A	100 mW

### Programming & Control

Output Control and Monitoring	Front panel and/or optional Analog 0 - +5V/+10V isolated/ Digital 12 bit: RS-232, RS-485, 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	30 – 150 kg