



EPS - Datasheet

Series E/PS 9000-3U

The electronic high performance power supplies of the »E/PS 9000 3U« series of EPS Electronic Power Supplies are especially suitable for test systems and industrial controls due to their compact construction in a 19" enclosure with 3 height units (3U).

DC output voltages between 0-40V (SELV) and 0-1500V, output currents between 0-40A and 0-510A and output power ratings of 0- 3.3kW/5kW/6.6kW/10kW/15kW are available.

Actual values, set values, status and alarms are clearly represented on coloured TFT display.

For remote control using a PC or PLC the devices are provided as standard with an Ethernet and USB-B slot on the rear side as well as an analog interface. All interface are galvanically isolated to the unit up to 1500V DC.

Thus the power supplies may, for example, be operated with other power supplies or even other types of equipment or controlled by a PC or PCL, all using the digital interfaces.

In addition, the devices offer as standard the parallel switching in Shared Bus operation for constant current sharing and for extension of the total power of up to 16 units with 240kW.

Also you have the possibility to connect the compatible power supplies via a Shared Bus, in order to create a so-called two-quadrant system. Typical applications i.e. for the source-sink principle are: battery test with automatic charge and discharge cycles, automotive electronic tests with simulation of transients (like voltage break-ins during engine starts) and cyclic charging and discharging of capacitors. A series operation is also possible with max. potential shift of 400V against PE on any DC minus pole.

All models are controlled by microprozessors. These enable an exact and fast measurement and display of actual values.

With the lock push button the controls can be locked, in order to protect the equipment from unintentional misuse.

In order to achieve rapid voltage changes with minimal ramp up and down times, the filter capacity can be reduced with the option High speed »EPS/HS«. It results in ramp times in the range of microseconds.

Models with a nominal output voltage of 200V or higher include a discharge circuit for the output capacities. For no load or low load situations, it ensures that the dangerous output voltage can sink to under 60V DC in max. 10 seconds after the DC output has been switched off (SELV according to EN60950).

Further options are GPIB (Ethernet eliminates this), water cooling (up to 200V) and calibration with protocol.

Energy efficiency: Auto-ranging, high efficiency, temperature controlled fans

Scope of delivery:

Power Supply Unit

Test report

AC-plug 5 pole

Share bus plug

Remote Sensing plug

1,8m USB cable

Set of DC-terminal cover

Set Share/Sense cover (Models from 750V)

USB-Stick with manual and Software

E/PS 9080-340 3U Laboratory Power Supply



E/PS 9000-3U

General data

Technology	Switching
Operation modes	CV. CC. CP
Mains	340-460 VAC, 3ph
Input frequency	45-65Hz
Power factor	>0,99
Display	TFT
Voltage resolution	0,01 V
Voltage accuracy	$\leq 0,1\%$
Voltage Stability Load	$< 0,05\%$ (0-100%)
Voltage Stability Mains	$< 0,02\%$ (+-10%)
Response time Voltage	$< 1,5\text{ms}$ (10-100%)
Rise time Voltage	max.30ms (10-90%)
High Speed	Option EPS/HS-10
Current Resolution	0,1 A
Current Accuracy	$\leq 0,2\%$
Current Stability Load	$< 0,15\%$ (0-100%)
Current Stability Mains	$< 0,05\%$ (+-10%)
Output Current Limitation	Standard
Power Accuracy	$< 1\%$
Overvoltage category	2
Overheat protection	Standard
Isolation In-/Output	2500V DC
Isolation Output/Enclosure	400V DC
Protection class	1
Series operation	Standard (400V max.)

Master-Slave Series operation	Standard
Parallel operation	Master-Slave
Current sharing	Standard
Cooling	Fan
Operation temperature	0-50°C
Storage temperature	-20...70°C
Humidity	<80% n.c
Attitude	<2000m
Design	19 inch
Standards	EN 61010-1, EN 61326, IEC61000-6-2:2005/6 class B
Power fail	Standard
Output Preset	Standard
Memory	5 Presets

Interfaces

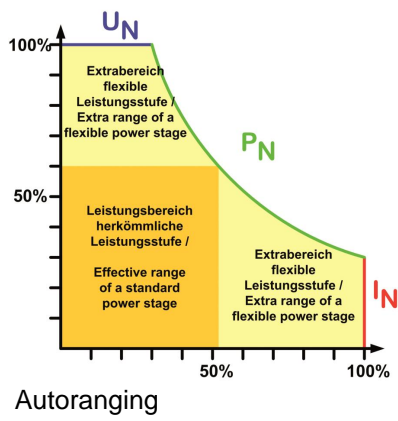
Analog Isolation	Standard
Accuracy Interface	U=1.5mV I=7mA P=0.55W
USB Interface	Standard
GBIP Interface	Option E/PS9000 3W
Ethernet Interface	Standard
Software	Standard EPS/PC

Technical data

Output Voltage	0-80 VDC
Output Current	0-340 A
Output Power	0-10000 W
Efficiency	93%
Ripple U	<320mVpp/<25mVrms
Ripple I	<160mArms
Remote Sensing	Standard
Dimensions in mm (WxHxD)	19" x 133 x 609
Weight	24 kg
Order code	200058

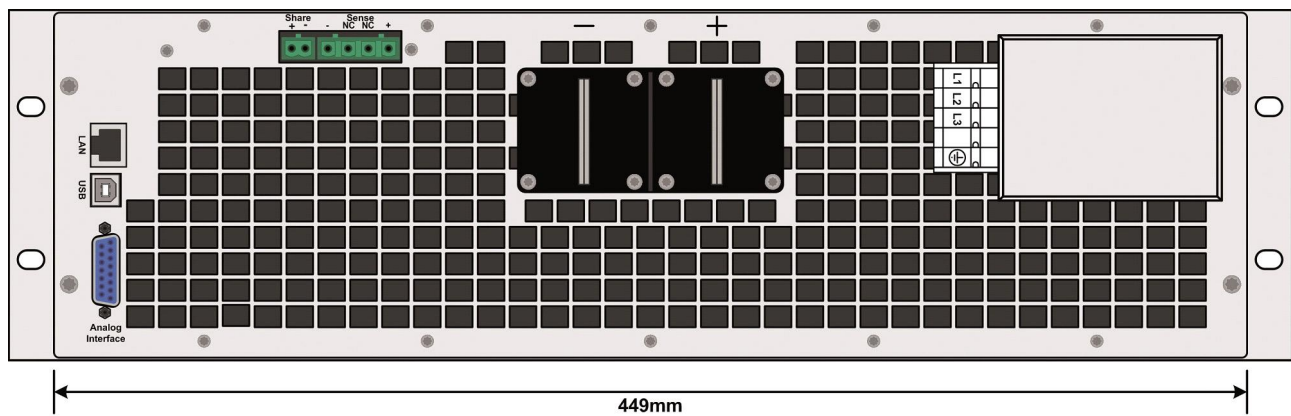
Options

Option 1	Calibration with protocol EPS/I9000 CAL
Option 2	Extended Warranty 3 / 5 years EPS/G
Option 3	Watercooling EPS/WC
Option 4	Mains Voltage 208V EPS/PS/I/E9000-US
Option 5	Input Voltage 342-528VAC EPS/WR

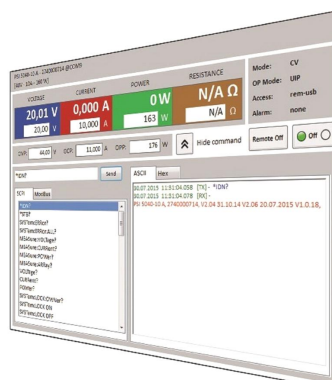


Series E/PS 9000-3U

Autoranging



E/PS9000_3u_rear



EPS/PC_Software

Subject to modification without notice, errors and omissions excepted

EPS Stromversorgung GmbH
Electronic Power Supplies
Alter Postweg 101 86159 Augsburg
Tel.: +49 (0) 821 570451-0
Fax.: +49 (0) 821 570451-25
E-mail: info@eps-germany.de
www.eps-germany.de