



EPS - Datasheet

Series E/PS 10000 4U

EPS's Electronic Power Supplies »E/PS 10000 4U« series new electronic high performance power supplies are especially suitable for test systems and industrial controls due to their compact construction in a 19" enclosure with 4 height units (U). DC output voltages between 0-60V (SELV) and 0-2000V, output currents between 0-40A and 0-1000A with an output power of 30kW are available. Set values and actual values, status and notifications are clearly represented on the intuitive 5" TFT touch panel. An HMI operated visual depiction of the temporal run of the actual values of voltage, current and power, called the GRAPH, is possible.

For remote control using a PC or PLC the devices are provided as standard with a Ethernet, USB-B slot on the rear side as well as a galvanically isolated analog interface. Via optional plug-in interface modules, other digital interfaces such as RS232, Profibus, ProfiNet, ModBus TCP, CAN, CANopen or EtherCAT can be added. These enable the devices to be connected to standard industrial buses simply by changing or adding a small module. The configuration, if necessary at all, is simple.

In addition, the devices offer as standard the possibility for parallel connection in so-called Shared Bus operation for constant current sharing plus a true master-slave connection with totaling of all the actual values is also provided as standard. Using this operating mode, up to 64 devices can be connected to form a system that offers an increased total output of up to 1920 kW.

A series operation is also possible with a potential shift (depending on the model) against PE on any DC plus or minus pole.

Optionally there are also a water-cooled version available which are usually configured and offered in cabinet systems with a complete water-cooling distribution inside. For DIY water-cooled systems, single units can also be obtained upon request.

Further options are calibration with protocol, extended warranty as well as 19" racks.

The devices are CE, UL as well as CSA certified.

Energy efficiency: Auto-ranging, high efficiency, temperature controlled fans, water cooling system

Scope of delivery:

Power Supply Unit

Test report

AC connector plug (clamp type)

Set for AC cable strain relief

Set DC terminal cover

2x Plug for Remote Sense

Terminal cover sense

USB cable 1,8m

USB-Stick with documentation and Software

E/PS 10080-1000 4U Laboratory Power Supply



E/PS 10000_4U

General data

Behavior	Unidirectional
Technology	Switching
Operation modes	CV. CC. CP
Mains	380V/400V/480V AC +-10% 3ph., 208V derating 18 kW
Input frequency	45-65Hz
Power factor	>0,99
Display	TFT Touchpanel 5"
Voltage resolution	0,01 V
Voltage accuracy	<=0,05% fs
Voltage Stability Load	<0,05% (0-100%)
Voltage Stability Mains	<0,01% (+-10%)
Response time Voltage	<1,5ms (10-100%)
Rise time Voltage	max.20ms (10-90%)
Current Resolution	0,1 A
Current Accuracy	<=0,1% fs
Current Stability Load	<0,1% (0-100%)
Current Stability Mains	<0,05% (+-10%)
Rise time Current	max.10ms (10-90%)
Output Current Limitation	Standard
Power Accuracy	<1%
Overvoltage category	2
Overheat protection	Standard
Isolation In-/Output	3750V DC
Isolation Output/Enclosure	neg.+1000V DC, pos.+1000V DC max.
Protection class	1

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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/UL/CSA-C22.2 61010-1,EN55011 cl.B,EN61326-1
Power fail	Standard
Output Preset	Standard
Memory	5 Presets
Capacity	25380µF

Interfaces

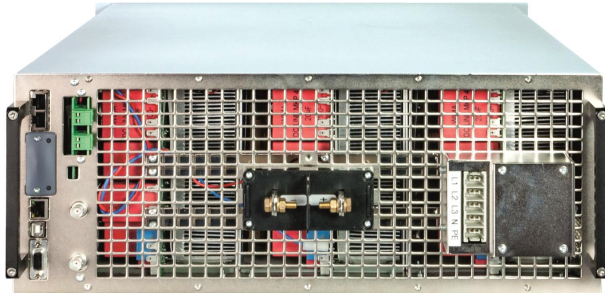
Analog Isolation	Standard
Accuracy Interface	0-10V <= 0.2%; 0-5V <=0.4%
USB Interface	Standard
RS232 Interface	Option EPS/IF-AB R
CAN Interface	Opt.EPS/IF-AB-CAN/O
Profibus	Option EPS/IF-AB PB
Ethernet Interface	Standard, Opt.IF-ETH2P
Ethercat Interface	Option EPS/IF-AB-ECT
Software	Standard EPS/PC, Option EPS/MC

Technical data

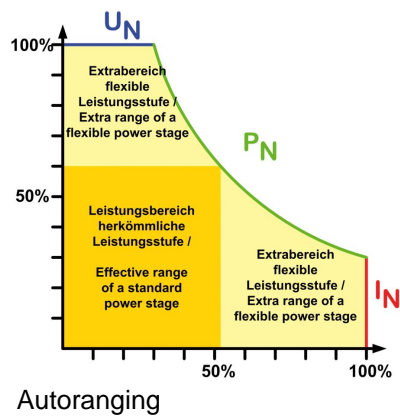
Output Voltage	0-80 VDC
Output Current	0-1000 A
Output Power	0-30000 W
Input Current	3x 56A
Efficiency	95,5%
Ripple U	320 mVpp(20Mhz)/25 mVrms(300k)
Ripple I	<26mArms
Resistance Adjustment Range 1	0,003 - 5 Ohm
Remote Sensing	Standard
Dimensions in mm (WxHxD)	19" x 178 x 668
Weight	50 kg
Order code	200905

Options

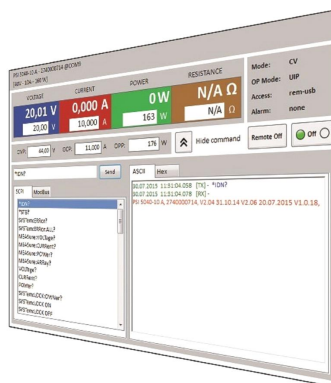
Option 1	Calibration with protocoll EPS/I10000 CAL
Option 2	Extended Warranty 2 / 3 / 5 years EPS/Gx
Option 3	Modbus Interface 1/2 Port EPS/IF-AB MB1P/2P
Option 4	EPS/WC-Cu 30 kW Water cooler
Option 5	EPS/BNC Cable Share-Bus connection cable
Option 6	EPS/SL 4x 2x AWG Master-Slave patch cable



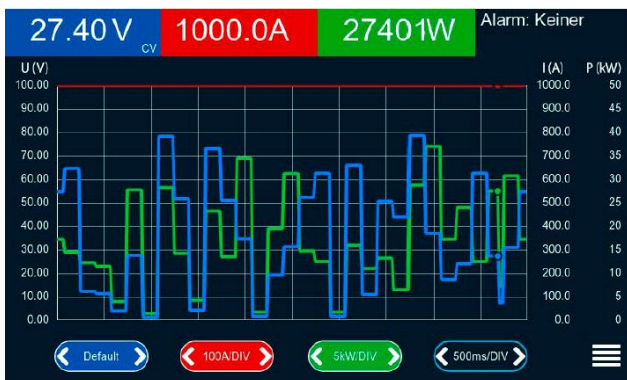
EPS 10000_rear



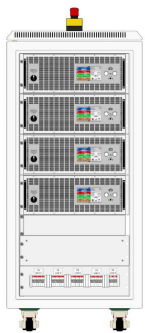
Autorangeing



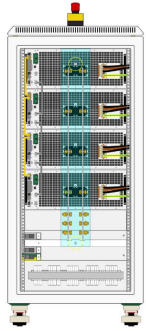
EPS/PC_Software



EPS 10000-4U Graph (HMI)



EPS_Cabinet front example 120kW



EPS_Cabinet rear example 120kW

Subject to modification without notice, errors and omissions excepted

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