



EPS - Datasheet

Series E/PS 10000 3U

EPS's Electronic Power Supplies »E/PS 10000 3U« series programmable power supplies are especially suitable for test systems and industrial controls, but also for laboratories and repair shops, due to their compact construction in a 19" enclosure with 3U height units. DC output voltages between 0-60V and 0-2000V, output currents between 0-20A and 0-510A and output power ratings 5/10/15kW are available. The very high efficiency is up to 96%.

All models are controlled by microprocessors for fast and exact measurement and display of actual values. Setpoints and actual values, status displays and messages are clearly displayed on an intuitive 5" TFT touch panel. The devices feature a manually callable, 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 the devices are provided as standard with Ethernet, USB port on the back as well as a galvanically isolated analog interface. Via optional plug-in interface modules, other digital interfaces such as Profibus, ProfiNet, Modbus TCP, CAN, CANopen, EtherCAT or RS232 can be added. These enable the devices to be connected to standard industrial buses simply by replacing or adding a small module. The configuration, if necessary at all, is simple. 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 PLC, all using the digital interfaces.

The data recording can be done on USB stick (logging). All interfaces are isolated to the unit with 1000V DC (up to 360V output) and with 2000V DC (more than 500V output).

In addition, the devices offer as standard the possibility for parallel connection in Share bus operation for constant current sharing plus a genuine master-slave connection with totaling of the slave units 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 960 kW.

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

Further options are the calibration with protocol, warranty extension and 19" racks.

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

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 10750-40 3U Laboratory Power Supply



E/PS 10000 3U

General data

Technology	Switching
Operation modes	CV. CC. CP, CR
Mains	380V/400V/480V AC +-10% 3ph., 208V derating 6 kW
Input frequency	45-65Hz
Power factor	>0,99
Display	TFT Touch Panel 5"
Voltage resolution	0,1 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	0,01 A
Current Accuracy	<=0,1% fs
Current Stability Load	<0,1% (0-100%)
Current Stability Mains	<0,01% (+-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.+1500VDC, Pos.+2000VDC max.
Protection class	1
Parallel operation	Master-Slave

Series E/PS 10000 3U

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	360µF

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-ETH1P/2P
Ethercat Interface	Option EPS/IF-AB-ECT
Software	Standard EPS/PC, Option EPS/MC

Technical data

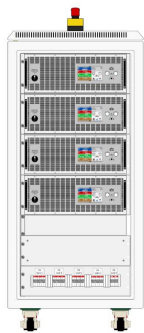
Output Voltage	0-750 VDC
Output Current	0-40 A
Output Power	10 kW/ 6kW derating
Input Current	2x28,1x16A
Efficiency	<=95,5%
Ripple U	800mVpp(20Mhz)/200mVrms(300k)
Ripple I	<32mArms
Resistance Adjustment Range 1	0,6...1100 Ohm
Resistance Resolution Range 1	0,1 Ohm
Remote Sensing	Standard
Dimensions in mm (WxHxD)	483 x 133 x 668
Weight	25,4 kg
Order code	200886

Options

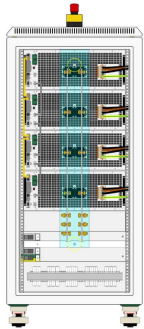
Option 1	Calibration with protocoll EPS/I10000 CAL
Option 2	Extended Warranty 2 / 3 / 5 years EPS/Gx
Option 3	Modbus Interface 1/2 Port EPS/IF-AB MB1P/2P
Option 5	EPS/BNC Cable Share-Bus connection cable
Option 6	EPS/SL 4x 2x AWG Master-Slave patch cable



EPS 10000 Graph (HMI)



EPS_Cabinet front example 120kW



EPS_Cabinet rear example 120kW

Subject to modification without notice, errors and omissions excepted

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