

EPS - Datasheet

Series E/PS 10000 2U

EPS's Electronic Power Supplies »E/PS 10000-2U« 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 2 height units (2U). DC output voltages between 0-60V (SELV) and 0-1500V, output currents between 0-6A and 0-120A and output power ratings of 0-1500W/3000W are available.

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.

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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 inerface 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 1500V 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 192 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
Mains cord Euro,UK, US and/or Swiss
plug (depending on destination)
Share-bus plug
2x Plug for Remote Sense
Set DC terminal cover
Terminal cover sense
Cable tie for strain relief
USB cable 1,8m
USB-Stick with documentation and Software



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Series E/PS 10000 2U

E/PS 11000-10 2U Laboratory Power Supply



E/PS 10000 2U

General data

| Behavior | Unidirectional |
|----------------------------|--|
| Technology | Switching |
| Operation modes | CV. CC. CP |
| Mains | 208/220V/230V/240V AC +-10% 1ph., 110V/120V derati |
| 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 | 0,001 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 |



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| Parallel operation | Master-Slave |
|-----------------------|--|
| Current sharing | Standard |
| Cooling | Fan |
| Operation temperature | 0-50°C |
| Storage temperature | -2070°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 | 60μF |
| | |

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

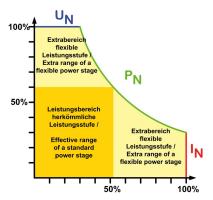
| Output voitage | 0-1000 VDC |
|-------------------------------|--------------------------------|
| Output Current | 0-10 A |
| Output Power | 3000W/1500W derating |
| Input Current | 16A |
| Efficiency | 95% |
| Ripple U | 100mVpp(20Mhz)/2000mVrms(300k) |
| Ripple I | 0,9mArms |
| Resistance Adjustment Range 1 | 3-6000 Ohm |
| Remote Sensing | Standard |
| Dimensions in mm (WxHxD) | 19" x 89 x 462 |
| Weight | 12,7 kg |
| Order code | 200045 |

Options

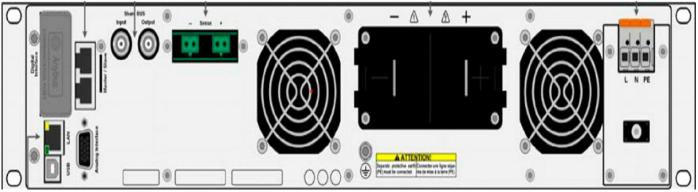
| Option 1 | Calibration with protocoll EPS/I10000 CAL |
|----------|---|
| Option 2 | Extended Warranty 2 / 3 / 5 years EPS/Gx |
| Option 3 | Modbus Interface 1/2 Port EPS/IF-AB MB1P/2P |
| Option 5 | EPS/BNC Cable Share-Bus connection cable |
| Option 6 | EPS/SL 4x 2x AWG Master-Slave patch cable |



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Autoranging



E/PS 10000-2U rear



EPS/PC_Software



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EPS 10000 Graph (HMI)



E_PS 1200_Cabinet front 120kW

Subject to modification without notice, errors and omissions exepted

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