

### **EPS - Datasheet**

### Series E/PSI 10000 2U

EPS's programmable Electronic Power Supplies »E/PSI 10000 2U« series are especially suitable for test systems and industrial controls due to their compact construction in a 19" enclosure with 2 height units (U). 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. The very high efficiency is up to 95%. All models are controlled by microprocessors for fast and exact measurement and display of actual values. Set values and actual values, status and notifications are clearly represented on the intuitive 5"TFT touch panel, too.

Apart from basic functions of power supplies, set point curves can be generated in the integrated arbitrary function generator (sine, rectangular, triangular, Offset and other curve types). Arbitrary curves (99 points) can be saved to and loaded from an USB stick. Additional a photovoltaic array (EN50530) and a fuel cell simulation as well a battery charging with charging characteristic is possible. Predefined test procedures for LV123, LV124 and LV148 can also be run.

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.

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 totalling 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 192kW.

Optionally available is the calibration with protocol, extended warranty and 19" racks.

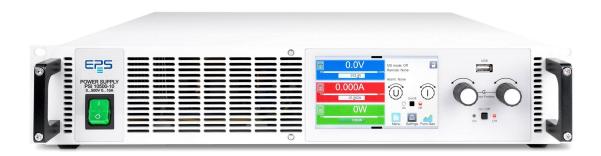
The devices are CE, UL as well as CSA certified.

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

Scope of delivery:
Power Supply Unit
Test report
Mains cord Euro,UK, US 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



# E/PSI 10080-60 2U Laboratory Power Supply



E/PSI 10000\_2u\_front

## **General data**

| Technology                     | Switching  |
|--------------------------------|--|
| Operation modes                | CV. CC. CP. CR                                     |
| Mains                          | 208/220V/230V/240V AC +-10% 1ph., 110V/120V derat. |
| Input frequency                | 45-65Hz  |
| Power factor                   | 0,99   |
| Display                        | TFT Touch Panel 4,0                                |
| 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             | 0,01 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%  |
| Internal Resistance Regulation | Standard   |
| Overvoltage category           | 2  |
| Overheat protection            | Standard   |
| Isolation In-/Output           | 3750V DC   |
| Isolation Output/Enclosure     | neg.+-1000VDC, Pos.+-1000VDC max.                  |
| Protection class               | 1  |



Series operation Standard (600V max.) 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 Alarmmanagement Standard Function generator +arbitrary Output Preset Standard 5 Profile Memory 8640µF Capacity

### **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                | 0-80 VDC                       |
|-------------------------------|--------------------------------|
| Output Current                | 0-60 A                         |
| Output Power                  | 1500W/1200W derating           |
| Input Current                 | 11A                            |
| Efficiency                    | 94%                            |
| Ripple U                      | 100 mVpp(20Mhz)/10 mVrms(300k) |
| Ripple I                      | <5,6mArms                      |
| Resistance Adjustment Range 1 | 0,04-80                        |
| Resistance Resolution Range 1 | 4 Digits                       |
| Remote Sensing                | Standard                       |
| Dimensions in mm (WxHxD)      | 483 x 88 x 462                 |
| Weight                        | 9,5 kg                         |
| Order code                    | 200211                         |

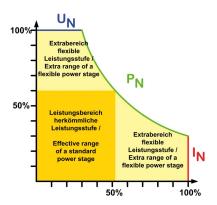
### **Options**

| Option 1 | Calibration with protocoll EPS/I10000 CAL   |
|----------|---|
| Option 2 | Extended Warranty 2 / 3 / 5 years EPS/Gx    |
| Option 4 | 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   |





E/PSI 10000\_2u\_rear

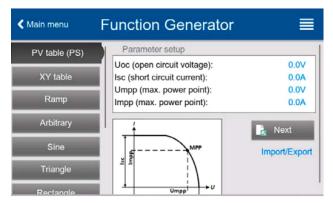


Autoranging



EPS/PC Software\_en





E/PSI Photovoltaics function

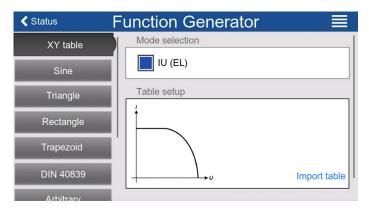


E/PSI 10000 Fuel Cell table



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# Series E/PSI 10000 2U



E/PSI XY-Tabelle -table

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