

# LABORATORY POWER SUPPLIES SERIES PS 2000



- Schools, Universities and Laboratories
- Industry and system applications
- Workshop and development
- Laboratories and test institutions
- Output voltage: 0...16V or 0...32V
- Output current: 0...2,5A, 0...5A, 0...10A
- Output power: 80W or 160W
- Digital LED Volt- and Ammeter
- Case closed on top and bottom
- Safety output sockets
- 100% duty cycle
- Safety: EN 60950
- EMI: EN 50081 part 1, EN 50082 part 1

## General

The main features of this series include the use of state of the art technology, safe and easy to use, compact size and very low cost. They are delivered in two output power classes: 80W and 160W.

There are no ventilation slots in either the top or base of the equipment, also no external heatsinks, again for improved safety all sockets are recessed. This attention to the safety and unit protection makes it ideal for schools and universities as well as test and development laboratories.

The output voltage is available through safety sockets on the front panel.

Voltage and current are indicated on separate LED-meters. Two or more units can be operated in parallel or in series connection.

The units can operate as constant voltage source with current limiter or as constant current source with voltage limiter. Constant voltage and constant current are adjustable from 0 up to the rated value.

The use of automatic transformer switching, MOS-FET power stages and temperature controlled variable fan cooling ensures accurate performance and very high reliability even under the most demanding conditions.

The units are capable of 100% duty cycle.

## Meters

### Digital meters for current and voltage

<b>Voltmeter:</b>	0...16V or 0...32V
<b>Accuracy:</b>	± (1% + 2 digit) at 23°C ±5°C
<b>Ammeter:</b>	0...2,5A, 0...5A or 0...10A
<b>Accuracy:</b>	± (1% + 4 digit) at 23°C ±5°C

## Ambient conditions

<b>Operating temperature:</b>	0°C ... 40°C at a
<b>Humidity</b>	10%... 80% non condensing

## Storage conditions

<b>Temperature:</b>	-25°C... 70°C
<b>Humidity:</b>	10% ... 80% non condensing

## Safety

Fuse in the primary circuit (the mains voltage is switched off).

The fan is fitted with a temperature sensor, which shuts down the unit in case the fan fails.

The units are according to the EMI regulations and carry the CE mark.

TECHNICAL DATA	EA-PS 2016-050	EA-PS 2016-100	EA-PS 2032--025	EA-PS 2032-050
<b>Input voltage 50...60Hz</b>	230V ±8%	230V ±8%	230V ±8%	230V ±8%
<b>Input power max.</b>	200VA	400VA	200VA	400VA
<b>Output power</b>	0...16V DC	0...16V DC	0...32V DC	0...32V DC
<b>-Stability 0...100% Load</b>	≤20mV	≤40mV	≤10mV	≤20mV
<b>-Stability ±8% V<sub>INPUT</sub></b>	≤3mV	≤3mV	≤5mV	≤5mV
<b>-Ripple</b>	≤4mV p-p	≤4mV p-p	≤4mV p-p	≤4mV p-p
<b>-Regulation 80...100% Load</b>	≤100µs	≤100µs	≤100µs	≤100µs
<b>-Temperature coefficient</b>	500ppm/°C	500ppm/°C	500ppm/°C	500ppm/°C
<b>Output current</b>	0...5A	0...10A	0...2,5A	0...5A
<b>-Stability 0...100% V<sub>OUTPUT</sub></b>	≤1mA	≤1mA	≤1mA	≤1mA
<b>Dimensions WxHxD mm</b>	210x132x255	210x132x255	210x132x255	210x132x255
<b>Weight</b>	5,25kg	5,9kg	5,25kg	5,9kg
<b>Article No.</b>	39200100	39200101	39200102	39200103

# DOUBLE - LABORATORY POWER SUPPLIES SERIE EA-PS 2000

- ❑ Schools, Universities and Laboratories
- ❑ Industry and system applications
- ❑ Workshop and development
- ❑ Laboratories and test institutes
- ❑ Output: 2 x 0...16V or 2 x 0...32V  
Fixed voltage 3...6VDC/2A
- ❑ Output current: 2 x 0...2,5A, 2 x 0...5A
- ❑ Parallel or serial mode selectable on the front
- ❑ Dual tracing from master
- ❑ Output power: 2 x 80W
- ❑ Digital LED Volt- and Ammeter
- ❑ Case closed on top and bottom
- ❑ Safety output sockets
- ❑ 100% duty cycle
- ❑ Safety: EN 60950
- ❑ EMI: EN 50081 part 1, EN 50082 part 1



EA-PS 2332-025

## General

The main features of this series include the use of state of the art technology, safe and easy to use, compact size and very low cost. They are delivered with an output power of: 2 x 80W. They are based on the single units of the series PS 2000. Voltage and current are indicated on separate LED-meters. The output voltages are available through safety sockets on the front panel.

## Dual Tracking (Serial and parallel operation)

Both lab-outputs can be connected in parallel or in series by means of a switch on the front panel. The left hand unit is then operating as the master control unit. The output values are indicated on the meters of the master unit (left side).

The units are equipped with a third output supplying a fixed voltage of 3...6 Volts and a max. current of 2A. This output is located on the right side with safety sockets. The voltage can be adjusted by means of a screwdriver near the output. The use of automatic transformer switching, MOS-FET power stages and temperature controlled variable fan cooling ensures accurate performance and very high reliability even under the most demanding conditions. The units are capable of 100% duty cycle.

**Input voltage:** 230 V  $\pm$ 10% 50/60Hz

## Meters:

### Digital meters for current and voltage

**2 x Voltmeter:** 0...16V or 0...32V  
**Accuracy:**  $\pm$  (1% + 2 digit) at 23°C  $\pm$ 5°C  
**2 x Ammeter:** 0...2,5A, 0...5A  
**Accuracy:**  $\pm$  (1% + 4 digit) at 23°C  $\pm$ 5°C

## Ambient conditions:

**Operating temperature:** 0°C ... 40°C at  
**Humidity** 10%... 80% non condensing

## Storage:

**Temperature:** -25°C... 70°C  
**Humidity:** 10% ... 80% non condensing

## Safety:

Fuse in the primary circuit (the mains voltage is switched off).

The fan is fitted with a temperature sensor, which shuts down the unit in case the fan fails.

The units are according the EMI regulations and carry the CE mark.

TECHNICAL DATA	EA-PS 2316-050	EA-PS 2332--025
<b>Input power max.</b> <b>Output power</b>	230V $\pm$ 10% 400VA	230V $\pm$ 10% 400VA
<b>Output voltage</b> -Stability 0...100% Load -Stability $\pm$ 8% V <sub>INPUT</sub> -Ripple -Regulation 80...100% Load -Temperature coefficient	2 x 0...16V DC $\leq$ 50mV $\leq$ 5mV $\leq$ 5mV p-p $\leq$ 100 $\mu$ s 500ppm/°C	2 x 0...32V DC $\leq$ 50mV $\leq$ 5mV $\leq$ 5mV p-p $\leq$ 100 $\mu$ s 500ppm/°C
<b>Output current</b> -Stability 0...100% V <sub>OUTPUT</sub>	2 x 0...5A $\leq$ 1mA	2 x 0...2,5A $\leq$ 1mA
<b>Fixed voltage, Output 3</b>	3...6V DC/2A	3...6V DC/2A
<b>Dimensions WxHxD mm</b> <b>Weight</b> <b>Article No.</b>	355 x 132 x 320 13kg 39200104	355 x 132 x 320 13kg 39200106