



Elektro-Automatik



## PS 3000 C

### Programmable Desktop DC Power Supplies | 160 W - 640 W

**Auto-Ranging Output Stage:** Flexible voltage and current combinations within the same power rating.

**Wide Power Range:** Supports output power from 160 W to 640 W, covering diverse applications.

**Advanced Protection Features:** Includes OVP, OCP, OPP, and overtemperature protection.

**Remote Sensing:** Compensates for voltage drops across cables to ensure accuracy at the load.

**Connectivity Options:** Offers optional USB, Ethernet, and analog interfaces for remote control and automation.

# EA-PS 3000 C 160 W - 640 W

Programmable desktop DC Power Supply



## Features

- Wide AC supply voltage range: 90...264 V, with active PFC
- Output power ratings: 0...160 W up to 0...640 W
- Output voltages: 0...40 V up to 0...200 V
- Output currents: 0...2 A up to 0...40 A
- Flexible, power-regulated output stage
- Various protections: OVP, OCP, OPP, OT
- Color display: For values, status, and notifications
- Carrying handle
- Remote sensing
- Optional, galvanically isolated interfaces
  - USB
  - USB + Analog
  - USB + Ethernet
- SCPI command set and ModBus RTU support
- LabView VIs and control software: For Windows

## Built-in interfaces

- USB
- Analog
- Ethernet

## Software

- EA - Power Control



## General

The PS 3000 C Series offers compact, programmable desktop DC power supplies for a wide range of applications. Designed with efficiency and versatility in mind, these power supplies provide output power ratings from 160 W to 640 W and auto-ranging output stages for enhanced flexibility. The intuitive color display, front-facing terminals, and compact design make it an excellent choice for laboratory, testing, and industrial environments.

## AC Supply

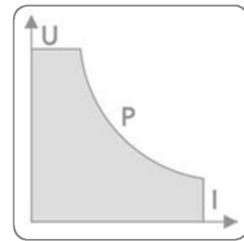
The PS 3000 C Series supports a wide AC input voltage range of 90...264 V, making it compatible with global power standards. Active Power Factor Correction (PFC) ensures efficient energy use and stable operation under varying input conditions.

## DC Output

Offering output voltages up to 200 V, currents up to 40 A, and power ratings up to 640 W, the PS 3000 C Series provides precise and stable DC power for a variety of applications. The flexible output parameters are easily adjustable via manual controls or remote interfaces, ensuring adaptability to any testing scenario.

## Autoranging Power Stage

The autoranging power stage provides flexibility by delivering higher voltage at lower current or higher current at lower voltage, all within the unit's power rating. This adaptability minimizes the need for multiple devices, making it suitable for a wide array of applications.



## Remote Sensing

The PS 3000 C Series includes remote sensing capabilities, allowing compensation for voltage drops across cables. By detecting and adjusting the output, the system ensures accurate voltage delivery directly at the load, maintaining testing precision.

## Protective Features

Advanced protective features such as Overvoltage Protection (OVP), Overcurrent Protection (OCP), Overpower Protection (OPP), and Overtemperature Protection (OTP) safeguard both the power supply and connected devices. The system automatically shuts off and displays an alert if thresholds are exceeded.

## Handling (HMI)

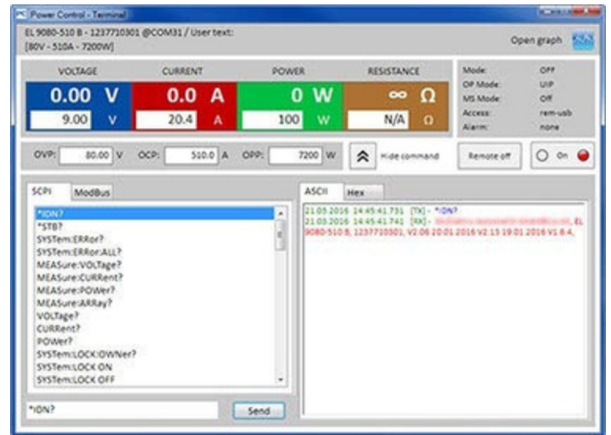
The user-friendly human-machine interface (HMI) features a multilingual color display, rotary knobs, and pushbuttons for intuitive operation. All key parameters, including voltage, current, and power, are displayed clearly, ensuring easy configuration and monitoring.

## Remote Control and Connectivity

The PS 3000 C Series supports a variety of optional interfaces, including USB, Ethernet, and analog connections, for seamless integration into automated setups. These interfaces enable remote control and data logging through industry-standard protocols such as SCPI and ModBus RTU.

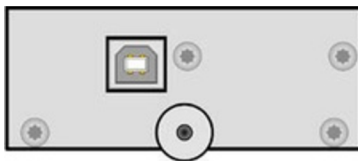
## Software and Programming

The included EA Power Control software simplifies remote operation with features like sequencing and multi-device control. Compatibility with LabView and comprehensive programming documentation make the PS 3000 C Series a robust solution for custom applications.

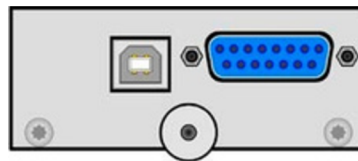


## Options

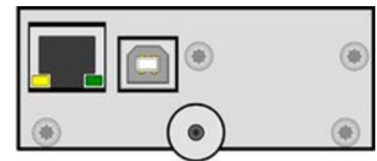
Expand the functionality of the PS 3000 C with retrofit interface cards for digital or analog control, enabling enhanced connectivity and automation. Available options include USB, USB + Ethernet, and USB + Analog interfaces, offering flexible solutions tailored to your needs.



USB

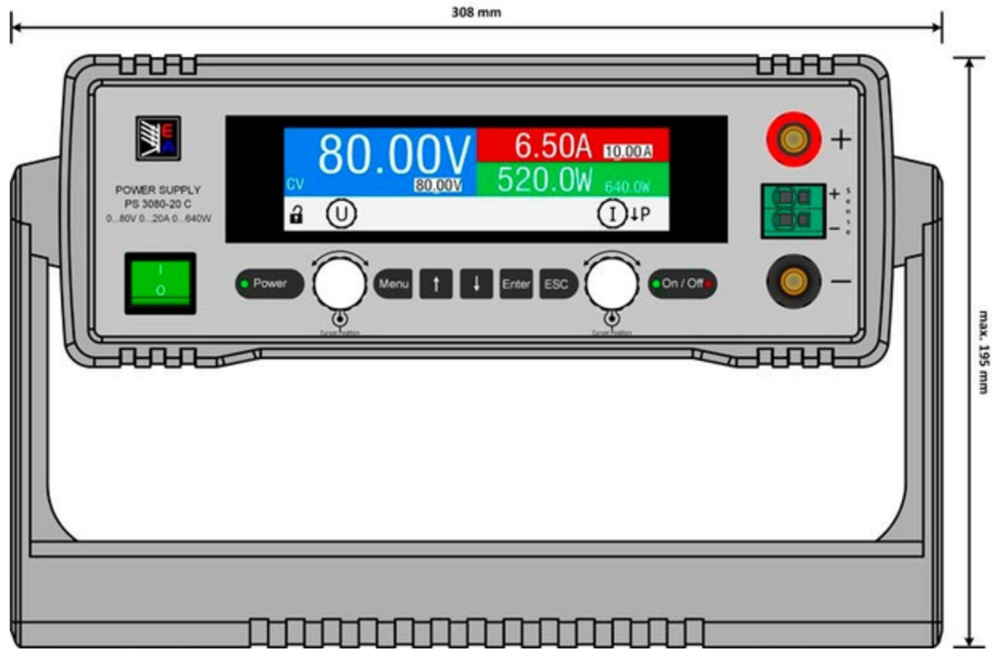


USB+Analog

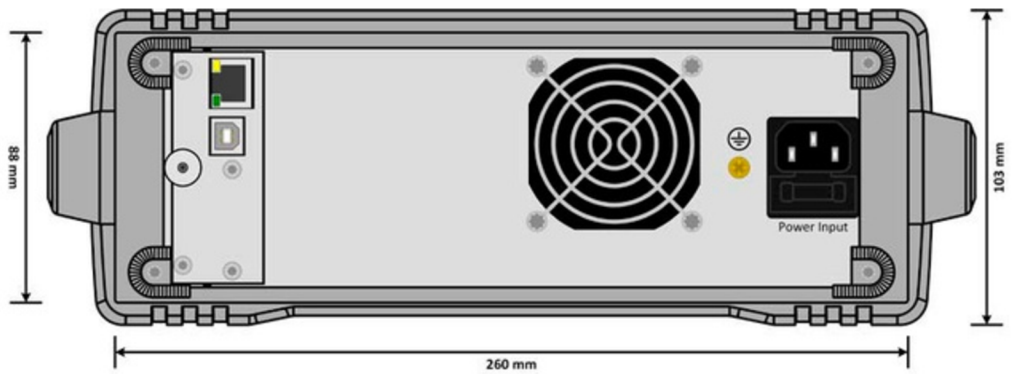


USB+Ethernet

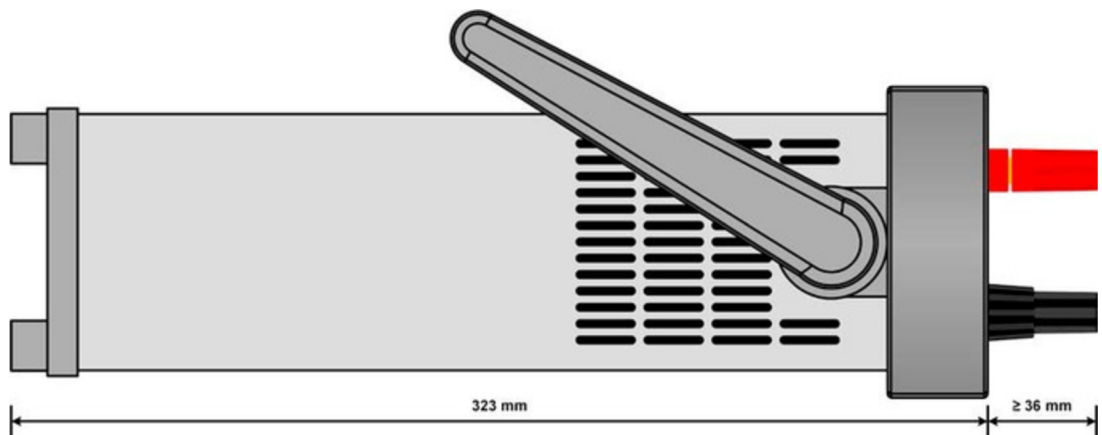
# Product Views



Front view with tilt stand in vertical position



Rear view with installed interface USB + Ethernet (optional)



Side view (160/320 W models)

# Specifications

## AC Input

- **Voltage:** 90...264 V
- **Frequency:** 47...63 Hz
- **Power Consumption:** Max. 750 W

## DC Output

- **Voltage Accuracy:**  $\leq 0.1\%$  of nominal value
- **Current Accuracy:**  $\leq 0.2\%$  of nominal value
- **Power Accuracy:**  $\leq 0.5\%$  of nominal value

## Output Ripple

- **Ripple Voltage (rms):**  $\leq 10$  mV
- **Ripple Voltage (pp):**  $\leq 50$  mV

## Remote Sensing

- **Compensation:** Up to 1 V per line

## Display

- **Type:** Color LCD

## Protective Functions

- Overtemperature (OT)
- Overvoltage Protection (OVP)
- Overpower Protection (OPP)
- Overcurrent Protection (OCP)
- Power Factor (PF)

## Environmental Conditions

- **Operating Temperature:** 0–50 °C (32–122 °F)
- **Storage Temperature:** -20–70 °C (-4–158 °F)
- **Relative humidity:** 5...85% RH (non-condensing)

## Mechanical Construction

- **Type:** Temperature-controlled fans
- **Weight:**
  - 160 W - 640 W:  $\approx 3.5$  kg
- **Dimensions:**
  - 160 W - 640 W: 200 x 87 x 301 mm



## Available Models

Model	Power (W)	Voltage (V)	Current (A)	Ripple (pp)	Ripple (rms)	Weight (kg)	Dimensions (W x H x D) (mm)
EA-PS 3040-10 C	0...160 W	0...40 V	0...10 A	30 mVPP	3 mVRMS	≈4 kg	308 x 103 x 323
EA-PS 3080-05 C	0...160 W	0...80 V	0...5 A	35 mVPP	4 mVRMS	≈4 kg	308 x 103 x 323
EA-PS 3200-02 C	0...160 W	0...200 V	0...2 A	70 mVPP	13 mVRMS	≈4 kg	308 x 103 x 323
EA-PS 3040-20 C	0...320 W	0...40 V	0...20 A	30 mVPP	3 mVRMS	≈4 kg	308 x 103 x 323
EA-PS 3080-10 C	0...320 W	0...80 V	0...10 A	35 mVPP	4 mVRMS	≈4 kg	308 x 103 x 323
EA-PS 3200-04 C	0...320 W	0...200 V	0...4 A	70 mVPP	13 mVRMS	≈4 kg	308 x 103 x 323
EA-PS 3040-40 C	0...640 W	0...40 V	0...40 A	25 mVPP	4 mVRMS	≈5 kg	308 x 103 x 350
EA-PS 3080-20 C	0...640 W	0...80 V	0...20 A	40 mVPP	6 mVRMS	≈5 kg	308 x 103 x 350
EA-PS 3200-10 C	0...640 W	0...200 V	0...10 A	100 mVPP	25 mVRMS	≈5 kg	308 x 103 x 350

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