



Elektro-Automatik

## LEADING-EDGE POWER ELECTRONICS MADE BY EA

Wide application spectrum. Technological excellence.

Global customer contact.

The EA Elektro-Automatik Group is Europe's leading supplier in the area of power electronics for R & D and industrial applications. At the headquarters in Germany in the industrial center of North Rhine Westphalia, more than 350 qualified associates, research, develop and manufacture high-tech devices such as programmable power supplies, high-power supplies and electronic loads with and without mains feedback..

### Development partner in forward looking industries

With leading edge technology and a broad application spectrum, EA has established itself as the development partner in forward looking industries. Our devices are used across industries – from battery and fuel cell technology, wind and solar energy, to electrochemicals processes, telecommunications and more.

### Automated quality assurance

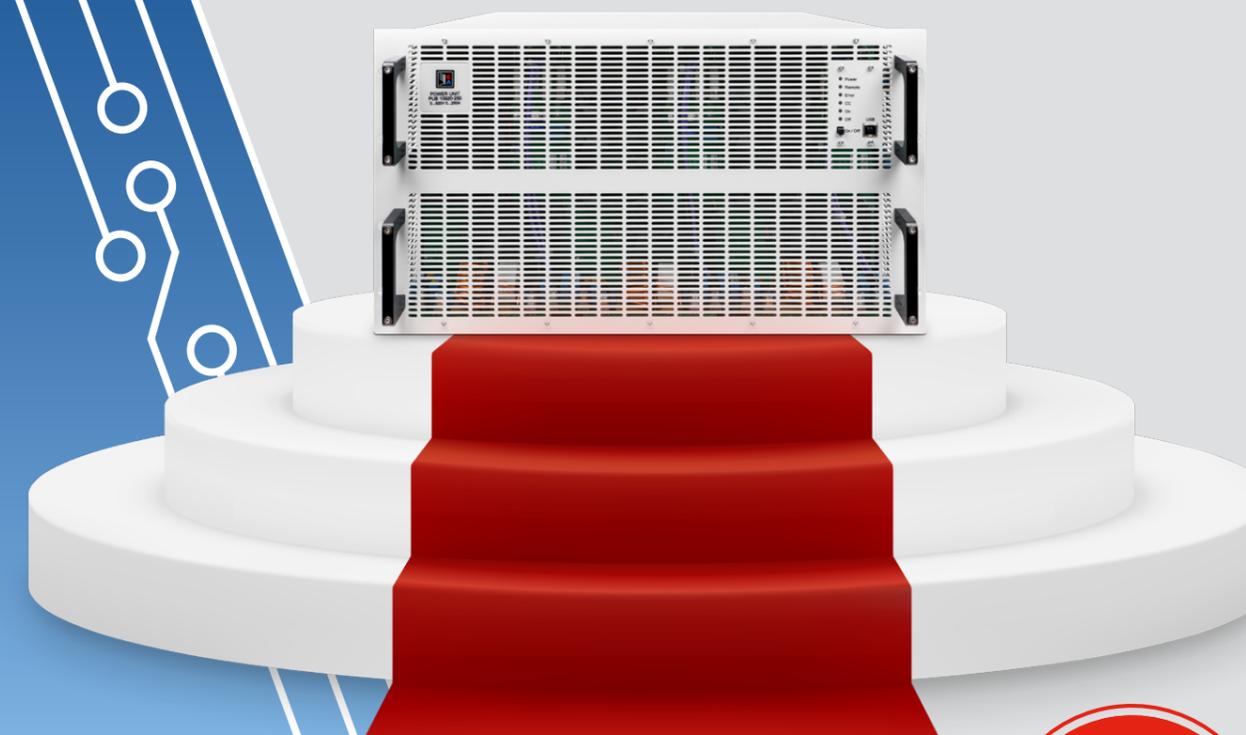
Results and experience from decades of R & D flow continually into new solutions. Automatic test systems with specially developed soft- and hardware assure consistent high product quality. Flexible production processes support fast reaction to changing customer requirements.

### Global customer contact, value sharing

As a mid-size company, EA manufactures local in Germany but acts globally with branches in China, USA and Singapore, sales office in Spain and a wide service and partner network. Value sharing, mutual respect and open communication characterise our organization.

### Technological excellence is the demand of tomorrow

The foundation of the company in 1974 was based on innovation, a tradition which is maintained today. What started with the development of simple mains adaptors is continued today in the overall concept of technology leadership. With highly specialized power supply systems for a multitude of applications, EA is driving the future of power electronics – technologically excellent for high performance and designed for resource protection and energy saving.



## PURE & POWERFUL

### EA-10000 Industrial Series

60 kW in 6U.  
30 kW in 4U.  
Up to 300 kW  
in a single rack.





## EA-10000 INDUSTRIAL SERIES

### New power density

With the new EA-10000 Industrial series, EA Elektro-Automatik (EA) has achieved a breakthrough in power density. The motto: Pure & Powerful! Powerful performance with 60 kW in 6U, 30 kW in 4U and up to 300 kW in a single rack, combined with pure design without manual display on the front.

### Large product variety

The product variety includes a total of 50 models with the device types EA-PU 10000 programmable DC power supplies, EA-PUB 10000 programmable bidirectional power supplies and EA-PUL 10000 DC regenerative electronic loads.

### EA-10000 Industrial Series with 6U Power

21 models with 60 kW power

Power Unit	EA-PU 10000 6U
Power Unit Bidirectional	EA-PUB 10000 6U
Power Unit Load	EA-PUL 10000 6U

Model	Voltage	Current	Power
10360-480	0 – 360 V	0 – 480 A	0 – 60000 W
10500-360	0 – 500 V	0 – 360 A	0 – 60000 W
10750-240	0 – 750 V	0 – 240 A	0 – 60000 W
10920-250	0 – 920 V	0 – 250 A	0 – 60000 W
11000-160	0 – 1000 V	0 – 160 A	0 – 60000 W
11500-120	0 – 1500 V	0 – 120 A	0 – 60000 W
12000-80	0 – 2000 V	0 – 80 A	0 – 60000 W

### High safety, low operating costs

The new Industrial series combines high safety with low operating costs. All models feature overcurrent, overvoltage, overpower and overtemperature protection functions. The bidirectional power supplies and regenerative electronic loads have power factor correction of 0.99 and return up to over 96% of the absorbed power to the grid.

### Efficiency in development and testing

All devices work with the same firmware and have similar input and output characteristics. The common programming and user interface saves time when developing and setting up test and control systems that require multiple power units.

### EA-10000 Industrial Series with 4U Power

29 models with 30 kW power

Power Unit	EA-PU 10000 4U
Power Unit Bidirectional	EA-PUB 10000 4U
Power Unit Load	EA-PUL 10000 4U

Model	Voltage	Current	Power
10060-1000	0 – 60 V	0 – 1000 A	0 – 30000 W
10080-1000	0 – 80 V	0 – 1000 A	0 – 30000 W
10200-420	0 – 200 V	0 – 420 A	0 – 30000 W
10360-240	0 – 360 V	0 – 240 A	0 – 30000 W
10500-180	0 – 500 V	0 – 180 A	0 – 30000 W
10750-120	0 – 750 V	0 – 120 A	0 – 30000 W
10920-125	0 – 920 V	0 – 125 A	0 – 30000 W
11000-80	0 – 1000 V	0 – 80 A	0 – 30000 W
11500-60	0 – 1500 V	0 – 60 A	0 – 30000 W
12000-40	0 – 2000 V	0 – 40 A	0 – 30000 W

## POWERFUL FEATURES

- DC input/output with autoranging
- Digitally (FPGA) controlled DC input/output U – I – P – R
- Latest SiC technology
- LEDs in the front to indicate the device status
- Optional stainless steel water cooling system
- AC mains input with extended range (380 V – 480 V, 3ph AC)
- Built-in interfaces: Ethernet, USB, Analog
- Optional interfaces: CAN, CANopen, EtherCAT, RS232, Profibus, Profinet, Modbus, Ethernet
- Communication with PCs and PLCs
- SCPI or ModBus programming modes
- Galvanically isolated Share-Bus
- Master-Slave-Bus up to 64 participants of the EA-10000 series
- Optional: function generator

## FOR INDUSTRIAL APPLICATIONS

- For use in ATE systems and automated process control systems
- For testing batteries and fuel cells
- For simulations of batteries and solar systems
- For the complete discharge of batteries for recycling
- Reliable power supply for electrolysis plants
- As sustainable power electronics for aviation application



## HIGH-POWER RACKS

### Save equipment costs and rack space

Increased performance can reduce the number of power supplies needed for a high-performance system. This saves significant capital and operating costs as well as important rack space. Power is provided in a smaller footprint. In addition, the electronic loads operate regeneratively, with efficiencies up to over 96 %.

### Powerful rack performance

- A 19" rack with 42 U for a system with 300 kW
- One system with up to 13 racks with 64 units of 60 kW each
- For high power applications up to 3.84 MW
- Emergency stop (machine standard EN60204-1)

### Optionally available:

- Mains monitoring (ENS)
- Insulation monitor
- Copper busbar for DC output

