

# TESTING SOLUTIONS FOR POWER ELECTRONICS INDUSTRIES OF TOMORROW



BATTERY



FUEL CELL



RENEWABLE ENERGY



AUTOMOTIVE



RAILWAY TECHNOLOGY



AVIONICS



MARINE & OFFSHORE



ATE



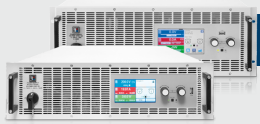
PRODUCTION TEST

## Power Supplies & Electronic Loads

High tech for research & development, industry, and education

### EA Bidirectional DC Programmable Power Supplies

Conventional & regenerative power supply



**19 Inch Slide-in Housing**  
(Series P5B and P5B 10000)

#### Highlights

- Autoranging
- Color TouchScreen
- 3-ways onboard Interface

#### Technical Specifications

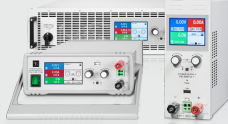
- **Nominal power**  
2500W to 30000W  
Systems up to 1.92MW parallel operation
- **Nominal voltage**  
60V to 2000V
- **Nominal current**  
20A to 1000A

#### Features

- Master-Slave-Bus for parallel connection
- 19" Full insertion
- 3 U or 4 U housing
- Analog and USB interface, further options retrofittable
- Microprocessor (FPGA) controlled
- Color touch panel
- Internal resistance control
- Battery test mode
- Arbitrary generator & car startup curve
- Optional: Digital, pluggable interface modules
- SCPI and ModBus protocol
- LabView VIs and control software

### EA Programmable DC Power Supplies

Benchtop & rackmount autoranging  
power supply



**19 Inch Slide-in Housing**  
(Series, P5, P5E and P5I)

#### Highlights

- Autoranging
- Color TouchScreen
- IF- Plug'n play interface-slot

#### Technical Specifications

- **Power**  
from 80W to 150kW and more
- **Voltages**  
0-16V to 0-15kV DC
- **Currents**  
0-6A from 0-510A (Systeme from 3500A)

#### Features

- Primary clocked, with autoranging output
- Externally controlled via analog and digital interfaces
- Permanently integrated interfaces and "plug n play" slot
- State-of-the-art  $\mu$ -processor or FPGA control
- Modular highly insulated architecture
- PV (Solar) Simulation
- Battery and fuel cell simulation
- function generator sine, rectangle, trapezoid, ramp, arbitrary
- Alarm Manager, User Profiles
- Suitable for laboratory bench and 19" integration
- Analog, Ethernet, USB, CAN, Profibus, GPIB, and many more
- Operator Software EA Power Control (Freeware), Multi-Control "App" (license required)

### EA Programmable DC Electronic Loads

Conventional & regenerative loads



**19 Inch Slide-in Housing**  
(Series EL / Dissipative)

#### Highlights

- Autoranging
- Color Touchscreen
- Master-Slave-Bus for Parallel Connection
- Two-quadrant expansion
- 19" Full slide-in, 2 height units
- Analog- und USB-Schnittstelle

#### Technical Specifications

- **Power**  
from 300W to 43,2kW (Systems to 227kW and more)
- **Voltages**  
0-80VDC to 0-750VDC
- **Currents**  
0-5A to 0-3060A (Systems to 3500A and more)

#### Features

- Externally controlled via analog and digital interfaces
- Table-top and 19" rack technology, turnkey system cabinets
- Permanently integrated interfaces and "plug n play" slot for interface retrofitting
- Modular highly insulated architecture, extremely reliable and filtered
- Many interface options: Analog, Ethernet, USB, CAN, Profibus, GPIB and many more
- User software EA Power Control (as freeware & payware)
- Operating modes CV, CC, CP, CR, battery test, MPPT (PV) simulation for operation on all types of batteries (Pb, NiCa, Li, etc.) as well as photovoltaic (PV) strings, ultracaps, fuel cells, EV motors, alternators & other direct current sources
- Integrated function generator with predefined waveforms such as sine, rectangle, trapezoid, ramp, arbitrary
- Air and water-cooled versions
- Parallel switchable in Master-Slave mode