

## Why should I chose for a Rack Power System of EA?

## **Advantages:**

- Turn-key-ready system racks with 24U, 33U or 42U that can be fit to customer's requirement with either power sources or electronic loads (sink) or a mix of sources- and e-loads (sinks)
- Available fittings for providing the most important functions with high reliability:
  - AC BUS (AC sub-distribution with integrated circuit breaker
  - DC BUS (central DC outlet via copper bars)
  - Emergency off (AC) via contactors
  - DC On/Off via output relays
  - Air- and water cooled systems (incl. water distributor)
- Available as stand-alone type with safety compliance to DIN EN 60950 (safety for information technology equipment) or extended to comply with DIN EN 60204-1 (safety of machinery) with TÜV South's field-inspection service available upon request
- Sources: Auto-ranging Output; Compared to power systems with conventional (rectangular) output characteristic, the auto-ranging feature allows to power a much larger number of devices (EUTs) with different nominal voltages
- Highly isolated structure, therefore much less sensitive against disturbances under operation (high electro-magnetic immunity to industrial environment standard, high reliability)
- Up to 1000V of isolation (-) DC pole to PE (protective earth) depending on model
- Sources: Fast discharge of output capacitance to IEC 1010 (high user safety, output voltage will decrease to <60VDC within < 10 sec. even under no-load condition
- Analogue 0-5V/0-10V and USB interfaces (all galvanically isolated) on board, as well as an intelligent slot to retrofit further digital interfaces such as CAN, CANopen, Ethernet, Devicenet, Modbus, Profibus/net, EtherCAT
- Sources (PSI) and loads/sinks (EL\_B/ELR): TFT Touch Display with 64.000 colours with integrated comfortable function generator (default waveforms: sinus, triangle, rectangular, trapezoid, DIN 40838/car, arbitrary, ramp, IU/IU) as well as alarm manager
- Sources (PSI): Integrated R-Mode (battery inner-resistance simulation); To simulate batteries (lead-acid, lead-gel, Nickel-Cadmium, Lithium, Nickel-metal-Hydride and others), integrated PV-source and fuel-cell simulator
- Loads/Sinks (ELR): Mains-Energy Recovery; the power extracted off the EUT (equipment under test) is not fully dissipated into heat loss, but recovered with an efficiency of up to 95% into the local grid
- Easy service in case of a failure: Owing to the usage of standardized units, exchange of a
  defective unit can be carried out easily on site by the user (high system availability = short
  production standstill)
- High resolution of up to 16 Bit (very fine programming and read-back steps)
- Voltage accuracy of up to 0.1% of nominal
- Professional control software "EA Power Control" for up to 20 devices (license fee applies)