



# SOFTWARE DEFINED POWER SUPPLIES

---

Fully digital power supplies revolutionize power test systems for automotive battery, aerospace, power & photovoltaic inverter testing.

As the world attempts to move to a more and more green lifestyle, test solutions for battery powered systems and battery testing must meet various market demands such as highest power and energy density, durability, safety and energy efficiency.

Moreover, they should be as compact as possible to not waste expensive facility footprint.



Terma has developed the fully digital power supply “ProUST UniverSAS®”, a new unique solution of highest efficiency, versatility and safety for testing batteries and battery powered subsystems. ProUST UniverSAS® has been designed with several markets, like Aerospace, automotive and PV systems in mind.

ProUST UniverSAS® benefits go far beyond functional aspects:

- Output power: up to 18 kW per module (scalable up to your needs in a grid)
- Voltage range: 0 – 1000 V
- Current ranges:  $\pm 25$  A per channel, Total  $\pm 200$  A (when channel switched in parallel)
- Current dynamics: -90 %...90 %: typ.  $< 20 \mu\text{s}$
- Voltage measurement accuracy:  $\pm 200$  mV  $\pm 0.5$  % of measured value
- Current measurement accuracy: up to  $\pm 200$  mA  $\pm 0.5$  % of measured value

## Imagine your Test Equipment Suddenly is Ten Times Better than Before

- Fully digital, therefore agile and configurable
- Highest power density 18 kW in 2 HU on module level, extendable depending on application
- Extreme usage flexibility and lean cabling
- Maximum safety (class II isolation)
- Low footprint and unique compact portable design
- Extremely high efficiency results in low heat dissipation

## Versatile and Green

Imagine your test equipment is not just one device that can do several things but incorporates the functionality of many devices that can do almost anything. Apart from the function as power supply unit or power load, the system offers additional reconfigurable control interfaces. Moreover, UniverSAS® can be partitioned flexibly and the different functions can be mapped independently to subarrays. Last but not least in top of the light output efficiency of 95%, in sink mode the energy is fed back into the grid instead of being converted into heat, making it a seal green device.