



### MSc SOLUTIONS FOR INDUSTRIAL AND ENERGY APPLICATIONS

Power conversion solutions and power converters

- Modularity
- Scalability
- Reliability
- Air and liquid cooled

#### **H2 solutions**

Production of hydrogen in electrolysis process requires large amount of electrical power ideally from renewable energy sources. Electricity from the fuel cells has to be converted to suitable form for each application. MSc **power converters** provide an excellent solution for hydrogen ecosystem.





## **Energy storage solutions**

MSc offering for energy storages and energy supply systems varies from converter and inverter products to complete system deliveries. We can deliver a complete containerized supercapacitor energy storage systems in cooperation with our partners, hybrid energy supply solutions connecting energy sources and storages, power conversion solutions (PCS), power back up solutions for critical motor drives, and independent converters as building blocks.







Electrification of vehicles has increased the need for batteries significantly. Discarded and end-of-life batteries need to be recycled so that the valuable materials can be reused. Before dismantling the batteries the stored energy has to be discharged. MSc has developed a **converter system** for battery discharging that enables using the energy from the batteries at the factory or fed to the grid.

#### **Inverters and rectifiers**

MSc offers **inverters and rectifiers** for variety of solutions. Our inverters and rectifiers have been designed for heavy industrial applications. Limitless parallel connectivity makes them excellent building blocks for large scale modular system architecture up to 100's of megawatts.

#### **DC/DC converters**

MSc uni- or bidirectional DC/DC converters can be used in different applications as boosters or step-down (buck) converter. Standard DC/DC converters are available in 80A and 120A nominal current rating. The converters can operate in wide voltage range area from 35Vdc up to 800Vdc. Both air and liquid cooled versions are available.

#### **Special converters**

MSc can design and manufacture **customized low voltage power converters** for small and medium volume series. Our tailored solutions are used in cryogenic gas transportation, high power AC and DC excitation, paper manufacturing, straddle carriers, and many other applications.



# **Contact us** Feel free to send us a message. We will take you further. info@msc.eu msc.eu Power of MSc