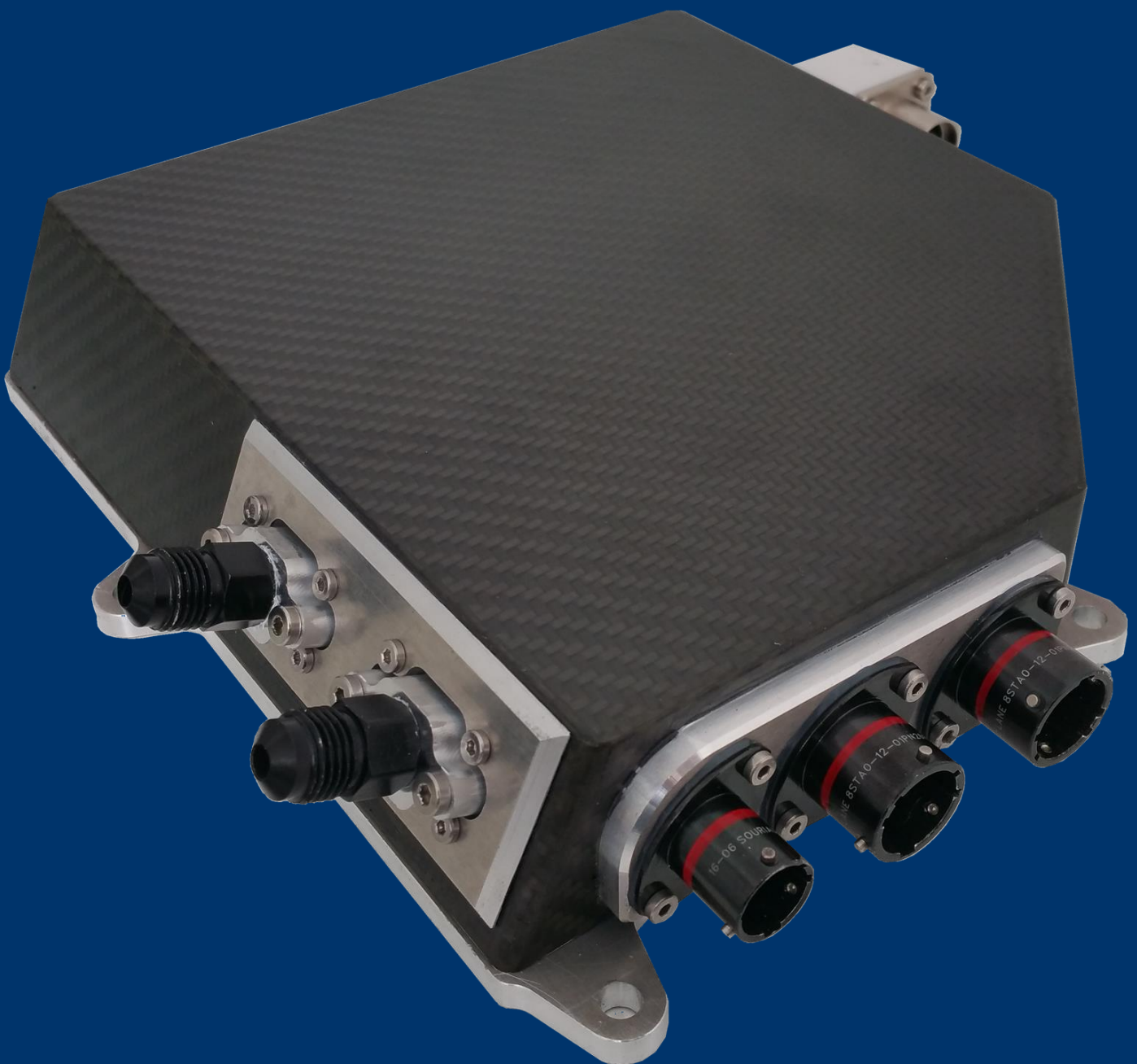
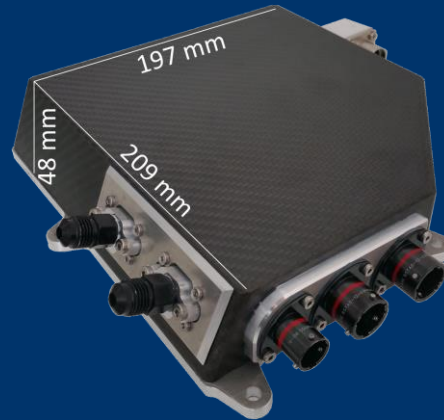
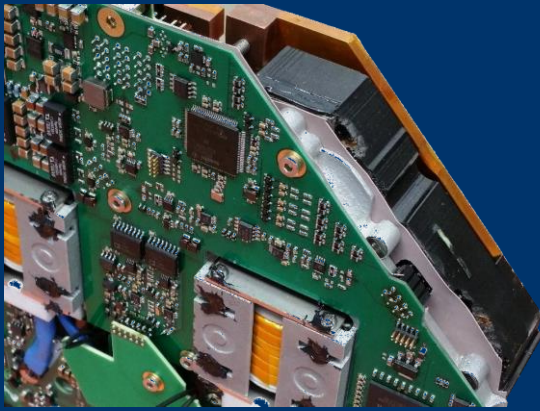


Isolated High Voltage DC/DC Converter for Auxiliary Power Supply



Isolated High Voltage DC/DC Converter



DC/DC Converter

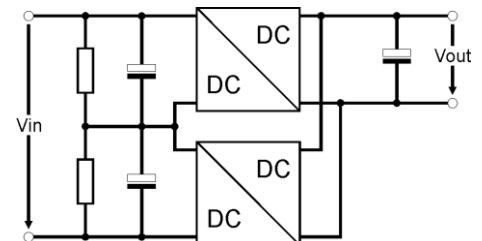
- Two input voltage and three output voltage versions for 12 V, 24 V or 48 V auxiliary power supply
- Full digital control
- Communication via CAN
- 85°C max. coolant temperature
- The serial connectable phases on the primary side allow the use of cost efficient semiconductors with only 600 V blocking voltage up to 800 V DC-Link voltage

Technical Data

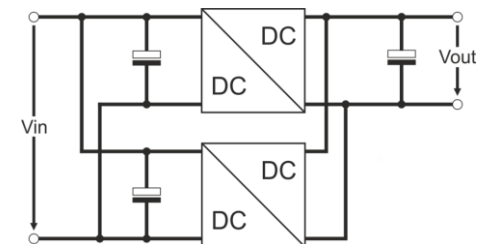
Input Configuration	Serial	Parallel
Two Input Voltage Ranges	550 V to 800 V	225 V to 400 V
Three Output Voltage Ranges	9 V to 16 V 16 V to 32 V 32 V to 52 V	
Corresponding Max Output Currents / Max Output Powers	250 A / 3 kW 200 A / 5 kW 100 A / 5 kW	
Max. Coolant Temperature	85 °C / 185 °F	
Switching Frequency	100 kHz	
Dimension	1.7 dm ³	
Weight	3.2 kg	
Power Density	up to 2.9 kW/dm ³	
Efficiency	up to 95.7 %	

Possible Input Configurations

Serial

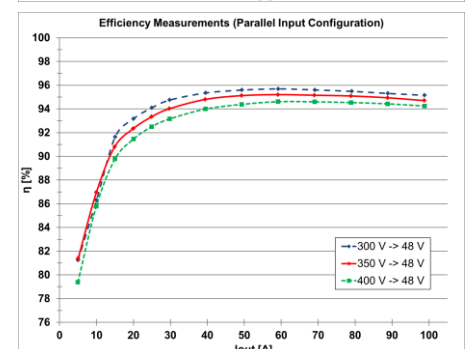
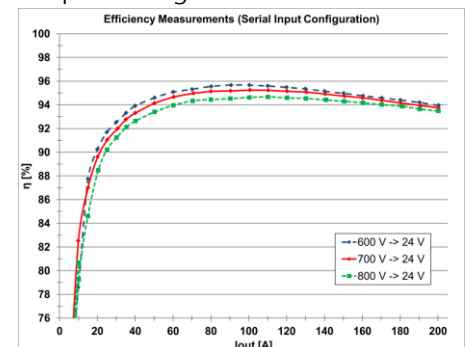


Parallel



Efficiency Measurements

Examples with 24 V and 48 V output voltage



Fraunhofer Institute for Integrated Systems and Device Technology IISB

Schottkystrasse 10
91058 Erlangen, Germany

Contact

Stefan Zeltner
Tel.: +49 9131 761-140
stefan.zeltner@iisb.fraunhofer.de

www.iisb.fraunhofer.de