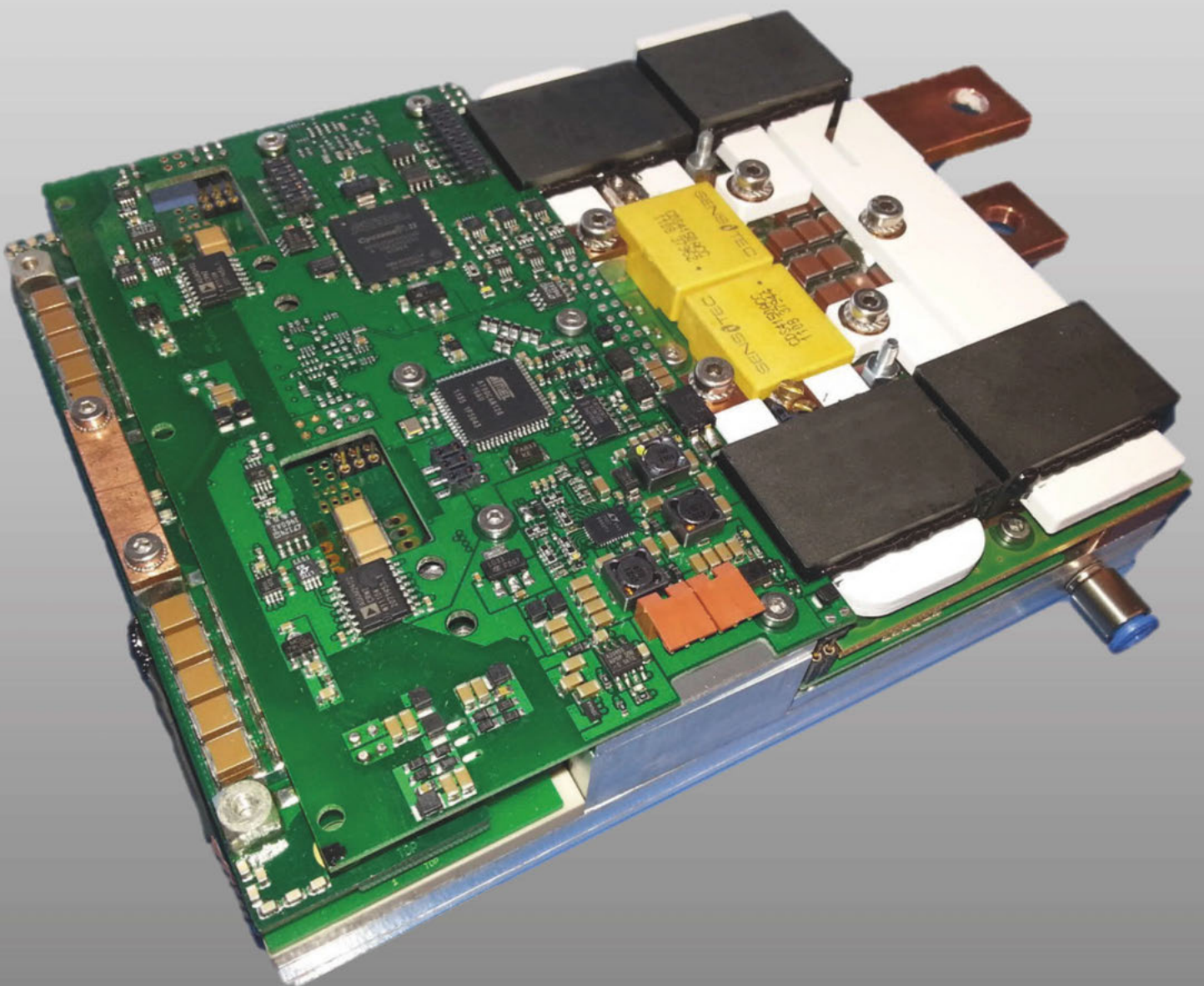


Isolated High Voltage DC-DC Converters for auxiliary power supply in electric vehicles





Isolated High Voltage DC/DC Converters for auxiliary power supply in electric vehicles

DC-DC Converter

- Two input voltage ranges for light and heavy trucks
- Three output voltages for 12 V, 24 V or 48 V auxiliary power supply
- Fully digital control
- CAN interface
- The serial connectable phases on the primary side allow the use of semiconductors with only 600 V blocking voltage up to 800 V DC-Link voltage
- The considerably better static and dynamic properties of these semiconductors reduce losses and a power density of 5 kW/dm³ could be achieved

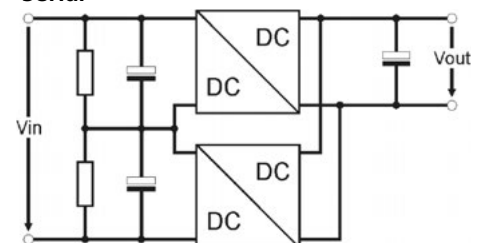
Technical Data

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*	140 x 170 x 42 mm ³	
Weight*	2250 g	
Power Density*	up to 5 kW/dm ³	
Efficiency	up to 95.7 %	

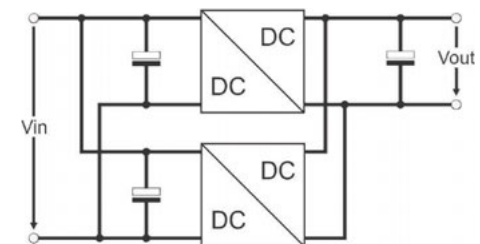
* Including cold plate but without housing

Possible Input Configurations

Serial

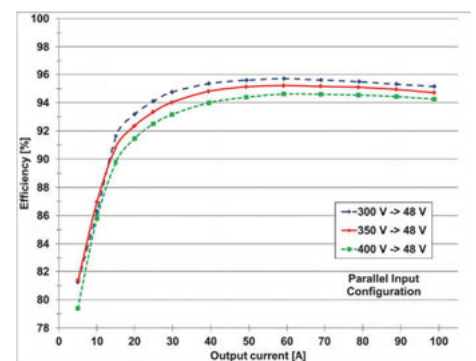
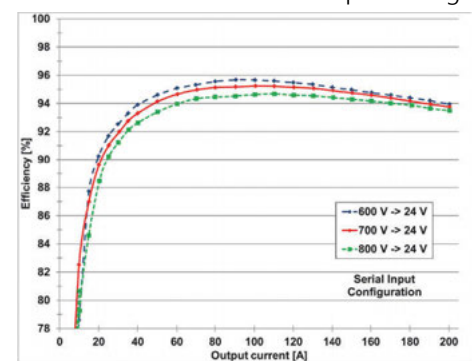


Parallel



Efficiency

Data with 24 V and 48 V output voltage



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