



HPDI

Motorsport

- High Power Drive Inverter (HPDI) is our ultra compact solution to drive complex machinery with extreme voltage/power/speed requirements
- HPDI can be used in Motorsport, Defence and various energy applications

General

- The innovative design of the HPDI offers a compact and extremely high power density solution to be used in demanding environments, typically motorsport racing. HPDI provides a fast dynamic control for systems requiring high voltage scales (up to 950 V) and electric motors up to 250 000 RPM.

Functionalities and Advantages

- Full SiC power components
- High voltage, current and speed operation
- Very high efficiency
- High switching frequency for a better dynamic behavior
- Fast dynamic control response
- Simple interface with high speed developed data monitoring system
- Sensorless and resolver feedback control options
- Vibration tolerant and compact design
- Typical usage in energy recovery systems, hybrid/electric cars
- Can be used for grid/energy applications

Black box version for testing purposes



Technical Specifications

Power Outputs	Peak current	330 A
	DC Voltage range	100 to 950 V
	Output power	up to 120 kW
	Efficiency	97,5% @ 750 V nominal voltage
	Switching frequency	Up to 60000 Hz
Motor drive	Electric motor drive type	DC, AC motors (synchronous/induction)
	Electric motor speed	Up to 250 000 RPM
Control	Control type	Power/Speed /Torque control
	Feedback control	Sensorless and resolver
Environment	Operating temperature	- 40° to 80°C
	Cooling	Liquid
	Vibrations	Vibration tolerant up to motor sport requirements
Overall dimensions and weight	Length	26 cm
	Width	14 cm
	Height	1,5 cm
	Weight	4,5 kg