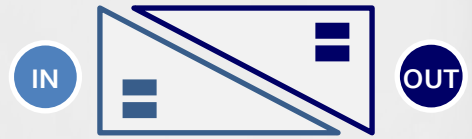


LVS – 800 V DC/DC Converter



High Density Power Converter Galvanically Isolated

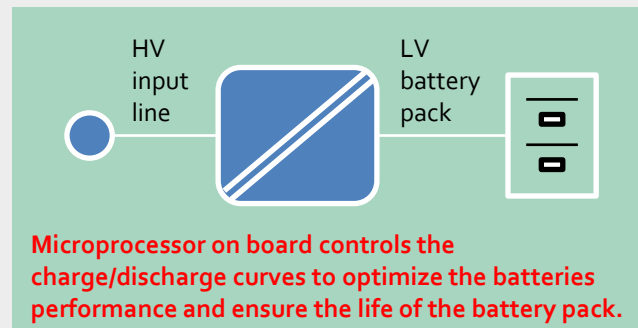
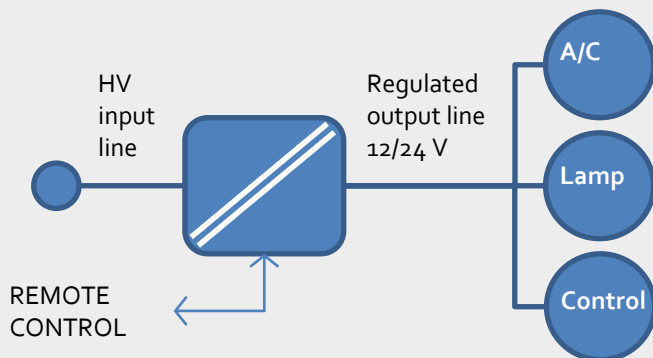
The auxiliary supply converter is the right link between a high voltage power source side (fuel cell, traction battery, super caps) and the low voltage side (12 V or 24 V wiring system).
The LVS “Low Voltage System” supplies all the auxiliary systems like lighting, air conditioning, battery charging and control circuits.

Features

- IN/OUT Galvanic Insulation
- Short Circuit Protection
- Overvoltage Protection and Undervoltage Lockout
- Thermal Management
- High Efficiency
- Compact and Vibration Robust Design
- Air or Water Coolant
- Total Digital Control
- Battery Application Layer to Charge Control
- Data Bus Interface (CAN BUS)



Typical Applications



	LVS-800/3	LVS-800/7.5	LVS-800/10	
High Voltage Side				
High voltage range	270-650	400-900	400-900	Vdc
Low Voltage Side				
Rated low voltage	24	24	42	Vdc
Regulation range	16 – 30	16 – 30	28 – 55	Vdc
Performance				
Continuous output current (@65°C amb.)	100	180	210	A
Maximum output current	110	200	250	A
Continuous output power (at rated voltage)	3	5	9	kW
Efficiency typical overall	>92%	>92%	>94%	
Switching frequency on TRAFO stage	55	75	105	kHz
Control and protections				
Signal measurement on low voltage side	V & I	V & I	V & I	V/A
Signal measurement on high voltage side	nd	nd	V & I	V/A
100% load transient response	< 100	240	< 300	ms
Start up response time		20 ms		
Data communication		CAN BUS 2.0 (SAE J1939)		
Low side protection		short circuit		
Mechanical data / cooling				
Weight	6	10	14.8	kg
IP-protection		IP67		
Operation temperature range		-40 to 85 °C		
Coolant type		natural, forced air or water cooled		
Insulation test voltage		2250 Vrms (2 sec)		