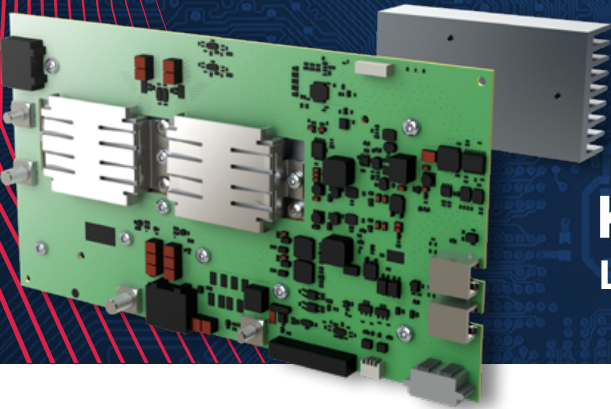


KOSTAL^rize

your power



KOSTAL DC/DC Converter

LV DC/DC Boost Converter (2.1 kW)

More than E²MS - Your specialist for complex customer requirements

KOSTAL Electronic Solutions is your partner for control and power electronics - made in Germany. Benefit from the established development, quality and production technologies of the KOSTAL Group with over 110 years of experience. Discover our broad product portfolio for power electronics. In addition to on-board chargers and wallboxes for electromobility and inverters for PV systems, we also offer high-performance DC/DC converters for fuel cell applications.

The KOSTAL LV DC/DC Boost Converter guarantees high energy efficiency, is environmentally friendly and is suitable for a wide range of applications - including your individual requirements.

Efficient and environmentally friendly

Thanks to the high efficiency of the KOSTAL DC/DC Converter energy loss is minimised, ensuring a stable energy conversion.

Diverse

The DC/DC Converter from KOSTAL offers the flexibility to use a variety of devices and systems with different voltage levels for a wide range of applications.

Reliable and consistent

The KOSTAL DC/DC converter is designed to maintain a stable output voltage in the event of changes in input voltage or load, ensuring a constant power supply

Large selection of features

- ⊕ Converter topology: Boost converter
- ⊕ Wide input voltage range from 10 to 60 V
- ⊕ Efficiency of up to 97.5 %
- ⊕ Synchronised parallel operation of several converters
- ⊕ Scalability from 1 to 5 appliances (2.1 to 10.5 kW)
- ⊕ Thermal monitoring and power control
- ⊕ Standardised cooling plate
- ⊕ Can be integrated into air-cooled and water-cooled application systems
- ⊕ Communicative thanks to RS-485 and CAN (optional)
- ⊕ Preset standard parameters
- ⊕ Simple integration into customer system
- ⊕ Can be integrated into 19-inch enclosure systems
- ⊕ Simple, individual configuration
- ⊕ Fast commissioning
- ⊕ Compatible with all LV battery systems (up to 60 V)
- ⊕ Battery reverse polarity protection and battery clamp protection

The heat sink of the KOSTAL LV DC/DC Boost Converter can be specified according to individual customer requirements.

Technical Data

KOSTAL LV DC/DC Boost Converter		
System data	Nominal power	2.1 kW
	Input voltage range [V _{DC}]	10 - 60
	Input current range [A _{DC}]	0 - 70
	Output voltage range [V _{DC}]	18 - 60 Due to the converter topology, the following criterion must always be fulfilled: input voltage < output voltage
	Output current range [ADC]	0 - 40
	Peak efficiency (fuel cell 30 V, 48 V Bat)	97.5 %
	Topology	Boost converter
	Scalable modules	1 to 5 (2.1 to 10.5 kW)
	Cooling	Standardised heat sink, can be integrated into application systems with air cooling and water cooling
Functions	Fuel cell power ramp	Yes
	Synchronised parallel operation of several converters	Yes
	Automatic master / slave recognition	Yes
	Update via bootloader	Yes
	Autonomous operation via digital IO	Yes
	Fully configurable via a dedicated parameterization tool	Yes
	Compatible with all LV battery systems < 60 V	Yes
Protective functions	Fuel cell: undervoltage, overcurrent	Yes
	Battery: overvoltage/undervoltage, overcurrent	Yes
	Reverse current detection	Yes
	Power limitation	Yes
	Thermal monitoring and power control	Yes
	Battery clamp protection	Yes
	Battery reverse polarity protection (if battery voltage and stack voltage < 80 V)	Yes
Ambient conditions	Ambient temperature [°C]	- 20 to + 60
	Storage temperature [°C]	- 40 to + 80
	EMC	Prepared for DIN EN 61000-6-1, DIN EN 61000-6-2, DIN EN 61000-6-3, DIN EN 61000-6-4 Note dependence on customer application.
	Installation height	Up to 5,000 m
	Relative humidity	Up to 95% - Condensation not permitted
	Mechanics	Dimensions L x W x H in mm
Weight (incl. cooling plate)		2 kg
Ingress protection code		IP 00
Comm.	Communication interface	RS-485
	Communication protocol	Modbus RTU, CAN, SPF (proprietary)
	Human-Machine-Interface	LED status indicator
Misc.	Project type	Series product
	Availability	Immediately

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