

ambiCONVERT Battery



03.2021

Specifications

| Version: | 20A | 70A | |
|-----------------------------|--|--------|--|
| Input power nominal: | 9kW | 31,5kW | |
| (@450V DC) | | | |
| Input power max.: | 20kW | 70kW | |
| Input voltage range: | 40V – 1000V DC | | |
| Starting voltage: | 30V DC | | |
| Input Channels: | 1 | 1 | |
| Input current max.: | 20A | 70A | |
| Output power nominal: | 15kW | 52,5kW | |
| (@750V DC) | | | |
| Output power max.: | 17kW | 59,5kW | |
| Output voltage range: | 48V 850V DC | | |
| Max. efficiency: | > 98% | | |
| Safety and protection: | Rapid discharge DC Bus and DC Output | | |
| | Over current monitoring | | |
| | Reverse polarity protection | | |
| | Temperature monitoring | | |
| | Self-test | | |
| Dimensions: | 19" / 3U / 700mm | | |
| Weight: | < 20kg | | |
| Operating temperature: | 0 - 40°C | | |
| Installation site: | indoor, no direct sunlight | | |
| Humidity: | 5% – 95%, non-condensing | | |
| Max. installation altitude: | 2000m | | |
| Storage temperature: | -20 - 60°C | | |
| Standards: | CE, EN61204-3, EN55011, EN60664-1, EN61140 | | |
| Communication: | CAN, other on request | | |
| Cooling: | active, built-in fans | | |
| Noise: | @1m, full load, tbd dB(A) @40°C | | |
| Topology: | transformer less | | |
| IP class: | IP20 | | |
| Degree of contamination: | 2 | | |
| Protection class: | | 1 | |

Options / Customiziation

| Communication via | |
|----------------------------|--|
| Modbus RTU / TCP | |
| Electric vehicle batteries | |
| Only Communication unit | |
| Housing | |

Features

| Bidirectional | |
|-------------------------------------|--|
| Adoption of voltage levels | |
| Conversion of communication | |
| Multiple battery support | |
| Individual data collection | |
| Individual / single battery control | |

Batteries out of electric vehicles have special needs out of there design for automotive. To use second and first life automotive batteries in stationary applications the communication and electrical parameters must be converted.

The ambiCONVERT Battery with its patented DCDC Flow Technology allows the use of multiple, different EV batteries in non-automotiv applications. With its modern power electronics design and control algorithm the ambiCONVERT allows

to individual control the power flow for each battery.

The ambiCONVERT Battery is also the right choice for connecting all other batteries to different types of inverters and DC grids.



Ambibox GmbH An der Ochsenwiese 3, 55124 Mainz info@ambibox.de, www.ambibox.de +49 6131 6339020 All parameters not specially mentioned are measured at 450V DC input, rated load and 20°C ambient temperature. Ripple & noise are measured at 20MHz bandwidth by using a standard probe. This product is considered a component which will be installed into the end product. The end product must be re-confirmed that it still meets the EMC directives. This product is intended for European Mains connections. Grid connectivity settings can differentiate depending on country codes. (certification pending). This is a preliminary datasheet. Specifications are subjected to change without notice. The contents of this brochure have been prepared with the greatest possible care. However, no guarantee is given for the correctness, completeness and up-to-dateness of the information and illustrations. We reserve the right to make changes and illustrations may differ. All product names are trademarks and registered trademarks of their respective owners.