



Test Winner 5 & 10 kW Storage Systems

POWER STORAGE DC 6.0 | 8.0 | 10.0

DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



up to 2 roof
orientations



quick and easy
installation



everything needed
from one source

HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- European efficiency > 98 %
- Input for high voltage battery
- Suitable for dynamic power adjustment
- Intelligent energy storage management with forecast based charging
- Exact and fast control behaviour

UNIQUE FLEXIBILITY

- 3-phase feed-in
- Wide MPP range for flexible string planning and easy repowering
- Max-Power Control - self-learning shade management
- Cascadable, expandable and combinable with existing PV-systems
- Hybrid-ready charging of the battery also with external AC sources
- Emergency power capability in conjunction with the RCT Power Switch
- Simple design with the RCT Power Designer - design tool

EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT Power APP solution
- No Internet access required for setup

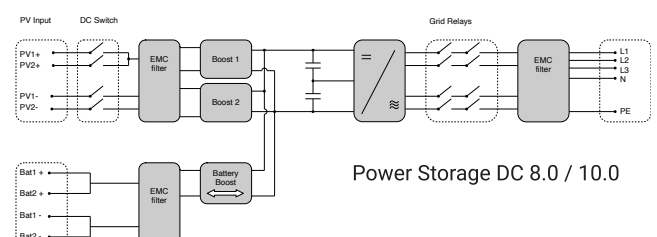
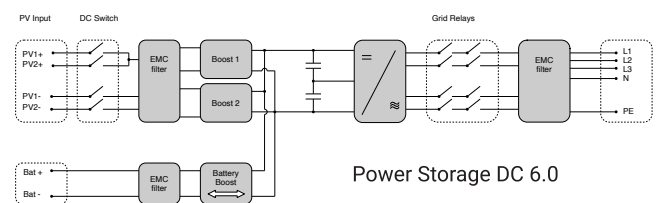
USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Multi-function communication board for connection of various devices
- Suitable for wallbox chargers, heating elements, heat pumps and energy management systems

INNOVATIVE DESIGN

- Silent, maintenance free cooling
- Durable aluminium housing
- With 35 kg a lightweight in its category
- IP42 protection: Suitable for indoor installation

BLOCK DIAGRAM



POWER STORAGE DC

6.0

8.0

10.0

BATTERY

DC voltage range	120 V ... 600 V	120V ... 600V	120V ... 600V
Max. charging / discharging current	20 A / 20 A	25A / 25A	25A / 25A
Max. charging / discharging power	9220 W / 6000 W	N/A	N/A
Plug type	Weidmüller PV Stick		
Battery tower connections	1	2	2

DC INPUT

Max. recommended DC Power (south / east-west) *	8,1 kW / 9 kW	10,8 kW / 12 kW	13,5 kW / 15 kW
MPPT	2 (can be connected in parallel)		
Input per MPPT	1		
Max. module current (Imp)	N/A	15,5 A	15,5 A
Max. DC current per MPPT	12 A	14 A	14 A
Max. short-circuit current PV input (Iscmax)	18 A	18 A	18 A
DC rated voltage	700 V		
DC starting voltage	150 V / 40 W		
DC voltage range	140 V ... 1000 V		
MPP voltage range	265 V ... 800 V	380 V ... 800 V	380 V ... 800 V
Max. DC voltage	1000 V		
Plug type	Weidmüller PV Stick		

AC OUTPUT (Grid operation)

AC rated power	6000 W	8000 W	9900 W
Max. active power	6000 W	8000 W	9900 W
Max. apparent power	6300 VA	10500 VA	10500 VA
Nominal AC current per phase	8,7 A	11,6 A	14,5 A
Max. AC current per phase	9,1 A	15,2 A	15,2 A
Rated frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Frequency range	45 Hz ... 65 Hz	45 Hz ... 65 Hz	45 Hz ... 65 Hz
Max. inrush current	9,1 A, 0,1 ms	15,2 A, 0,1 ms	15,2 A, 0,1 ms
Max. residual current (RMS)	285 mA		
AC rated voltage	230 V / 400 V (L1, L2, L3, N, PE)		
AC rated voltage range	180 V ... 290 V		
Distortion factor	< 2 % at rated power		
Reactive power factor	1 (setting range 0,8 cap ... 0,8 ind)		
Protection against island operation	yes		
Earth fault monitoring	RCD		
DC current feed	< 0,5 % In		
Necessary phases, grid connections	3 (L1, L2, L3, N, PE)		
Number of feed-in phases	3		
Mains voltage monitoring	3-phase	N/A	N/A
AC connection	spring loaded clamps	spring loaded clamps	spring loaded clamps

PERFORMANCE DATA

Self-consumption	< 4,0 W	6,0 W	6,0 W
Max. efficiency PV2AC	98,16 %	98,60 %	98,60 %
European efficiency PV2AC	97,90 %	98,33 %	98,35 %
Average efficiency PV2AC	N/A	97,78 %	97,89 %
Average efficiency PV2Bat	N/A	98,00 %	98,00 %
Average efficiency AC2Bat	N/A	97,33 %	97,44 %
Average efficiency Bat2AC	N/A	97,36 %	97,48 %
Mean dead time / settling time	N/A	0,1 s / 0,4 s	0,1 s / 0,4 s
Round trip efficiency	94,40 %	N/A	N/A
Topology	transformerless		

GENERAL

PV-DC load break switch	integrated		
DC overvoltage category	II		
AC overvoltage category	III		
Display	LCD dot matrix 1218 x 64 illuminated		
Cooling power electronics	free convection		
IP protection class	42		
Ambient temperature range	-25°C ... 50°C (40°C at full load)		
Max. relative humidity	5 - 85 % (non-condensing)		
Typical noise level	≤ 35 dB		
Type of installation	wall mounting		
Max. installation height above sea level	2000 m		
Dimensions (width x height x depth)	585 x 570 x 200 mm	585 x 570 x 200 mm	585 x 570 x 200 mm
Weight	30 kg	32 kg	32 kg

COMMUNICATION / INTERFACES / STANDARDS

Communication interfaces	Wi-Fi, Ethernet, RS485, MFR, 4 x digital in, 2 x digital in/out		
Protection class	1		
Overload behavior	operating point shift		
Safety	EN/IEC62109-1, EN/IEC621090/2		
Public grid	VDE-AR-N 4105:2018-11, EN 50549		
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3		

* Depending on orientation, inclination and location of the installation