



POWER STORAGE DC 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



Test Winner 5 & 10 kW Storage Systems



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

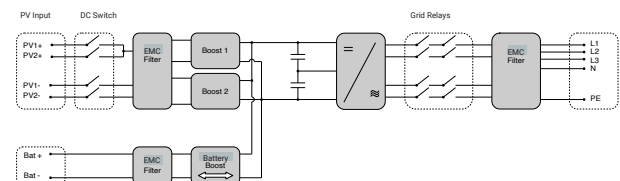
USER FRIENDLY COMMUNICATION

- 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 32 kg a lightweight in its category
- IP42 protection: Suitable for indoor installation

BLOCK DIAGRAM



POWER STORAGE DC

8.0

10.0

DC INPUT

Max. recommended DC power (South / East-West) ¹⁾	10,8 kW / 12 kW	13,5 kW / 15 kW
MPPT	2 (paralleling possible)	
Input per MPPT	1	
Maximum DC current per MPPT	14 A (28 A in parallel mode)	
Max. short circuit current PV input (Iscmax)	18 A (36 A in parallel mode)	
Rated DC voltage	700 V	
DC start up voltage / power	150 V / 40 W	
DC voltage range	140 V ... 1000 V	
MPP voltage range	380 V ... 800 V	
Maximum voltage DC	1000 V	
Connector type	Weidmüller PV-Stick	

BATTERY INPUT

DC voltage range	120 V ... 600 V	
Maximum charge / discharge current	25 A / 25 A	
Maximum charge / discharge power	11,5 kW / 8kW	11,5 kW / 10 kW
Connector-type	Weidmüller PV-Stick	

AC OUTPUT (GRID-MODE)

Real AC output power	8000 W	9900 W
Maximum active power	8000 W	9900 W
Maximum apparent power	10500 VA	10500 VA
Nominal AC current per phase	11,6 A	14,5 A
Maximum AC current per phase	15,2 A	15,2 A
Rated frequency	50 Hz / 60 Hz	
Frequency range	45 Hz ... 65 Hz	
Max. switch-on current	15,2 A, 0,1ms	
Max. fault current (RMS)	285 mA	
Rated AC voltage	230V / 400 V (L1, L2, L3, N, PE)	
AC voltage range	180 V ... 290 V	
Total harmonic distortion (THD)	< 2% at rated power	
Reactive power factor (cos phi)	1 (adjustable range 0,8 cap....0,8 ind)	
Anti-islanding operation	yes	
Earth fault protection	RCD	
DC current injection	< 0,5% In	
Required phases, grid connections	3 (L1, L2, L3, N, PE)	
Number of feed-in phases	3	
Type of AC connection	spring clamps	

PERFORMANCE

Stand-by consumption with discharged battery storage ²⁾	6,0 W	
Maximum efficiency (PV2AC)	98,60 %	98,60 %
European efficiency (PV2AC)	98,33 %	98,35 %
Average efficiency PV2AC ³⁾	97,78 %	97,89 %
Average efficiency PV2Bat ³⁾	98,00 %	98,00 %
Average efficiency AC2Bat ³⁾	97,33 %	97,44 %
Average efficiency Bat2AC ³⁾	97,36 %	97,48 %
Average delay time / settling time	0,1s / 0,4s	
Topology	transformerless	

OTHERS

PV - DC - switch	integrated	
DC- / AC- overvoltage category	II / III	
Data interface	WLAN, LAN, RS485, multifunctional dry contact, 4 x digital in, 2 x digital in/out	
Display	LCD dot matrix 128 x 64 with backlight	
Cooling	convection	
IP degree of protection	IP 42	
Max. operating altitude	2000 m	
Max. relative humidity	5 - 85 % (non condensing)	
Typical noise	< 35 dB	
Operating temperature range	-25°C ... 60°C (40°C at full load)	
Type of installation	wall mounting	
Dimensions (height x width x depth)	570 x 585 x 200 mm	
Weight	32 kg	

SAFETY / STANDARDS

Safety class	I	
Overload behaviour	working point adjustment	
Certificates	CE, VDE-AR-N 4105:2018-11, EN 50549	
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3	
Safety	EN/IEC62109-1, EN/IEC62109-2	
Warranty	10 years	

¹⁾ Depending on orientation, inclination and location of installation.

²⁾ Measurement results according to efficiency guidelines for RCT Power Storage 10.0 with RCT Power Battery 11.5

³⁾ Average efficiencies in combination with a RCT Power Battery 11.5 and Umpnnenn