



POWER STORAGE DC 8.0 | 10.0

DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV 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

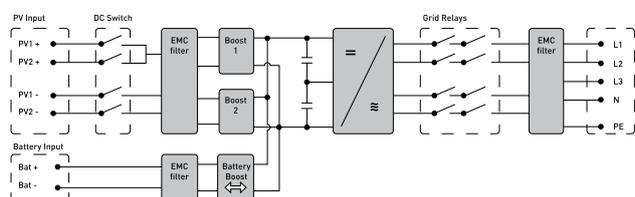
USER FRIENDLY COMMUNICATION

- 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
Order number	IHP080N1AE0	IHP100N1AE0

DC-INPUT

Max. recommended DC power	13200 W	16500 W
MPPT	2 (paralleling possible)	
Input per MPPT	1	
Maximum DC current per MPPT	14 A (28 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 (MC4 compatible)	

BATTERY-INPUT

DC voltage range	120 V ... 600 V
Maximum charge / discharge current	25 A / 25 A
Connector type	Weidmüller PV-Stick (MC4 compatible)

AC-OUTPUT (GRID MODE)

Rated 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	180V ... 290V	
Total harmonic distortion (THD)	< 2% at rated power	
Reactive power factor (cos phi)	1 (adjustable range 0,8 cap...0,8 ind)	
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 W	
Maximum efficiency (PV2AC)	98,60%	98,60%
European efficiency (PV2AC)	98,33%	98,35%
Average efficiency PV2AC ¹⁾	97,78%	97,89%
Average efficiency PV2Bat ¹⁾	98,00%	98,00%
Average efficiency AC2Bat ¹⁾	97,33%	97,44%
Average efficiency Bat2AC ¹⁾	97,36%	97,48%
Average delay time / settling time ²⁾	0,1s / 0,4s	
Topology	Transformerless	

¹⁾ Average efficiencies in combination with a RCT Power Battery 11.5 and UmpNenn ²⁾ Measurement results according to efficiency guidelines for RCT Power Storage 6.0 with RCT Power Battery 11.5

OTHERS

PV – DC-switch	Integrated
DC- / AC- overvoltage category	II / III
Data interface	WIFI, 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 ... 50°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	1
Overload behaviour	Working point adjustmen
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