



POWER STORAGE DC 4.0 | 6.0

DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS

HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- Transformerless topology
- Very high efficiency
- 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

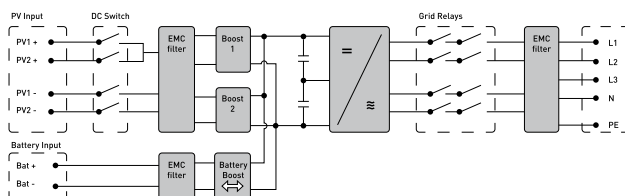
USER FRIENDLY COMMUNICATION

- 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
- IP42 protection: Suitable for indoor installation

BLOCK DIAGRAM



Power Storage DC		4.0	6.0
Order number		IHP040N1AE0	IHP060N1AE0
DC-INPUT			
Max. recommended DC power		6600 W	9900 W
MPPT		2 (paralleling possible)	
Input per MPPT		1	
Maximum DC current per MPPT		12 A (24 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		265 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		20 A / 20 A	
Maximum charge / discharge power		9220 W / 4000 W	9220 W / 6000 W
Connector type		Weidmüller PV-Stick (MC4 compatible)	
AC-OUTPUT (GRID-MODE)			
Rated AC output power		4000 W	6000 W
Maximum active power		4000 W	6000 W
Maximum apparent power		6300 VA	6300 VA
Nominal AC current per phase		5,8 A	8,7 A
Maximum AC current per phase		9,1 A	9,1 A
Rated frequency		50 Hz / 60 Hz	
Frequency range		45 Hz ... 65 Hz	
Max. switch-on current		9,1 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)	
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	
Grid voltage monitoring		3-phase	
Type of AC connection		Spring clamps	
PERFORMANCE			
Stand-by consumption		< 4,0 W	
Maximum efficiency (PV2AC)		98,16%	98,16%
European efficiency (PV2AC)		97,60%	97,70%
Average efficiency PV2AC ¹⁾			96,30%
Average efficiency PV2Bat ¹⁾			96,60%
Average efficiency Bat2AC ¹⁾			95,40%
Average delay time / settling time		0,1s / 0,4s	
Topology		Transformerless	
¹⁾ Average efficiencies in combination with a RCT Power Battery 11,5 and UmppNenn			
OTHERS			
PV – DC-switch		Integrated	
DC overvoltage category		II	
AC overvoltage category		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 ... 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		30 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	