



POWER STORAGE DC 4.0 | 5.0 | 6.0

DC-COUPLED BATTERY INVERTER FOR
RESIDENTIAL AND COMMERCIAL INSTALLATIONS

HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- Transformerless topology
- Very high efficiency
- Input for high voltage battery
- Dynamic power adjustment (0 - 100%)
- Intelligent energy storage management
- Forecast based charging

UNIQUE FLEXIBILITY

"Fits all"-technology allows all types of modules, all string layouts and all roofs (orientation, shading) without loss of efficiency

- 3-phase output
- Allows up to 100 % power imbalance of MPP-trackers
- Possible input voltage range between 140 V and 1000 V
- Maximum input current: 2 x 12 A

EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated APP solution
- Pre-installed country-specific parameters

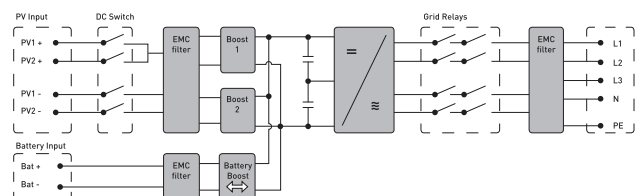
USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- WiFi, LAN and APP operation without internet
- Integrated data monitoring and alerts via APP
- Multi-function communication board for connection of various devices

ROBUST DESIGN

- Efficient heat sink: Silent, maintenance free fanless cooling
- Compact and lightweight hardware design
- Durable aluminium housing
- IP42 protection: Suitable for indoor installation

BLOCK DIAGRAM



YOUR LOCAL MERCHANT

INFORMATION & DISTRIBUTION

RCT Power GmbH
Line-Eid-Str. 1
D-78467 Konstanz

Phone: +49 7531 99677 0
info@rct-power.com
www.rct-power.com



Power Storage DC	4.0	5.0	6.0
Order Number	IHP040N1AE0	IHP050N1AE0	IHP060N1AE0

DC-INPUT

Max. recommended DC power	6600 W	8300 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 / 5000 W	9220 W / 6000 W
Connector type	Weidmüller PV-Stick (MC4 compatible)		

AC-OUTPUT (GRID MODE)

Rated AC output power	4000 W	5000 W	6000 W
Maximum active power	4000 W	5000 W	6000 W
Maximum apparent power	6300 VA	6300 VA	6300 VA
Nominal AC current per phase	5,8 A	7,3 A	8,7 A
Maximum AC current per phase	9,1 A	9,1 A	9,1 A
Rated frequency	50 Hz / 60 Hz		
Frequency range	45 Hz ... 65 Hz		
Max. switch-on current	13 A, 0,1ms		
Max. fault current (RMS)	285 mA		
Rated AC voltage	230V / 400 V (L1, L2, L3, N, PE)		
AC voltage range	180V ... 270V		
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 (PV – grid)	98,16%		
European efficiency (PV – grid)	97,6%	97,7%	97,7%
Maximum efficiency (PV – battery – grid)	94,4%		
Topology	Transformerless		

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° at full load)		
Type of installation	Wall mounting		
Dimensions (height x width x depth)	570 x 585 x 200 mm		

SAFETY / STANDARDS

Safety class	1		
Overload behaviour	Working point adjustment		
Certificates	CE, VDE-AR-N 4105:2011-08, EN 50438		
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3		
Safety	EN/IEC62109-1, EN/IEC62109-2		