



POWER STORAGE DC 3.68 | 4.0 | 5.0 | 6.0 SP

SINGLE-PHASE HYBRID OUTDOOR INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



up to 3 roof
orientations



quick and easy
installation



everything needed
from one source

HIGH EFFICIENCY

- Three independent MPP-Trackers
- 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

- DC & AC Coupling compatible
- 1-phase feed-in
- Up to 2 high voltage batteries per inverter
- Wide MPPT 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

EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT RESS App solution

USER FRIENDLY COMMUNICATION

- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Suitable for wallbox chargers, heating elements, heat pumps and energy management systems

INNOVATIVE DESIGN

- Silent, maintenance free cooling
- Durable aluminium housing
- With 22 kg a lightweight in its category
- IP65 protection: Suitable for outdoor installation

MODEL	RHS-3.68K-H	RHS-4K-H	RHS-5K-H	RHS-6K-H
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PV INPUT

Max. Recommended DC Power [W]	7,360	8,000	10,000	12,000
No. of MPP Trackers	3			
Strings Per MPP Tracker	1			
Max. Input Current [A]	16			
Max. Short Circuit Current [A]	20			
Rated Input voltage [V]	360			
Max. DC Voltage [V]	600			
MPPT Voltage Range [V]	90 - 580			
Start-up Voltage [V]	120			

BATTERY INPUT

DC Voltage Range [V]	120 - 520			
Max. Charge/ Discharge Current [A]	25 / 25			
No. of Battery input	2			
Battery Type	LiFePO ₄			

AC INPUT / OUTPUT (ON-GRID SIDE)

Rated output power [W]	3,680	4,000	5,000	6,000
Max. output power [W]	3,680	4,000	5,000	6,000
Max. output apparent power [VA]	3,680	4,000	5,000	6,000
Rated input apparent power [VA]	3,680	4,000	5,000	6,000
Max. AC input apparent power from grid [VA]	3,680	4,000	5,000	6,000
Max. output current (@230V) [A]	16	17.4	21.7	26.1
Max. Input current from grid [A]	16	17.4	21.7	26.1
Rated frequency	50Hz			
Frequency range	45 - 55Hz			
Rated AC voltage	230V, L/N/PE			
AC voltage range	184V - 265V			
Total harmonic distortion (THD)	< 3% at rated power			
Adjustable power factor	0.8 leading ~ 0.8 lagging			

AC OUTPUT (BACK-UP MODE)

Back-Up Rated Power [VA]	3,680	4,000	5,000	6,000
Rated AC voltage	230V, L/N/PE			
Rated Frequency	50Hz			

PERFORMANCE

MPPT efficiency	99.90%			
Max. efficiency (BAT to AC)	97.10%			
Max. efficiency (PV to BAT)	98.00%			
Max. efficiency	97.10%			
European efficiency	96.60%			

OTHERS

Communication	RS485 / CAN / Wi-Fi / LAN			
Display	LED Indicator; WLAN + APP			
Cooling	Natural Convection			
IP degree of protection	IP65			
Max. Operating Altitude	4000 m			
Max. relative humidity	0% - 100% , non-condensing			
Typical noise	< 30 dB			
Operating temperature range	-25°C ~ +60°C (Derating above +45°C)			
Dimensions(height×width×depth)	605 × 445 × 165 mm			
Weight	22 kg			

SAFETY / STANDARDS

Safety Regulation	IEC 62109-1, IEC 62109-2			
Grid Regulation	EN 50549-1, EN 50549-10, RD 647/UNE 217001/UNE 217002/NTS 631 Type A, G99, CEI 0-21, AS/NZS4777.2			
EMC Regulation	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN 61000-4-16, EN 61000-4-18, EN 61000-4-29			