

RH (3.6-6)K-EU

SINGLE-PHASE LOW VOLTAGE RESIDENTIAL HYBRID INVERTER

- Support diesel generator connection
- Support Max. 16pcs parallel
- Colorful touch LCD
- IP65 protection degree
- Max. charging/discharging current of 120A
- Support remote control/ change settings without internet

RH (3.6-6)K-EU

SINGLE-PHASE LOW VOLTAGE RESIDENTIAL HYBRID INVERTER

MODEL	RH 3.6K-EU	RH 4K-EU	RH 4.6K-EU	RH 5K-EU	RH 6K-EU
PV input					
Vmax PV (Vdc) (absolute Max.)	500	500	500	500	500
Max. PV input current / Isc PV (A)	13+13 / 17+17	13+13 / 17+17	13+13 / 17+17	13+13 / 17+17	13+13 / 17+17
No.of MPPT Trackers / Number input strings	2 / 1+1	2 / 1+1	2 / 1+1	2 / 1+1	2 / 1+1
MPPT voltage range (@ full power) (Vdc)	125-425 (240-425)	125-425 (240-425)	125-425 (240-425)	125-425 (240-425)	125-425 (240-425)
Power pv Max(kW)	4.68	5.2	5.98	6.5	7.8
Battery (charge/discharge)					
Battery type	Li-ion/Lead-acid				
Battery Norma Voltage (Range) (Vdc)	48V (40-60V)				
Max charge/discharge Current(A)	90	100	110	120	120
Max charge/discharge Power(kW)	3.96	4.4	5.06	5.5	5.5
AC Grid (input and output)					
Input/Output Frequency and Voltage	50 / 60Hz; 230Vac (single phase)				
Normal / Max. input/output current (A)	15.7 / 18	17.4 / 19.1	20 / 22	21.7 / 25	26 / 26
Max. cont. Power / Apparent Power (kW/kVA)	3.96 / 3.96	4.4 / 4.4	5.06 / 5.06	5.5 / 5.5	6.0 / 6.0
Power factor(adjustable)	1.0(-0.8~ +0.8)				
AC Load output (stand alone)					
Input/Output Frequency and Voltage	50 / 60Hz; 230Vac (single phase)				
Nominal Current(A)	15.7	17.4	20	20	26
Max. cont. Power / Apparent Power (kW/kVA)	3.96 / 3.96	4.4 / 4.4	5.06 / 5.06	5.5 / 5.5	6.0 / 6.0
Power factor(adjustable)	1.0(-0.8~ +0.8)				
Efficiency					
Max.Efficiency / Euro Efficiency / MPPT Efficiency	97.60% / 97.00% / 99.90%				
Protection					
Integrated Protection	PV Input Lightning Protection / Anti-islanding Protection / DC circuit breaker / PV String Input Reverse Polarity Protection / Insulation Resistor Detection / Residual Current Monitoring Unit / Output Over Current Protection / Output Shorted Protection / Output Over Voltage Protectior				
Surge Protection	DC Typell/AC Type II				
Certifications and Standards					
Grid Regulation	VDE 0126,AS4777,NRS2017,G98,G99,IEC61683,IEC62116,IEC61727				
Safety Regulation	IEC62109-1,IEC62109-2				
EMC	EN61000-6-1.EN61000-6-3.FCC 15class B				
General Data					
Operating Temperature Range (C) / Protection Degree / Cooling / Noise (dB) / Protective class	-25~60C,>45C Derating / IP65 / Smart cooling / <30 dB / Class I				
Weight (kg)	22.5				
Size (mm)	340Wx580Hx225D				
Installation Style	Wall-mounted				
Warranty	5 years				



RH (3-6)K-EU

Single-Phase High Voltage Residential Hybrid Inverter

Professional Service

Experienced expert team to provide 24/7 service

High Flexibility

UPS level switching time <10ms

IP65 Rated

Engineered to test with maximum suitable for outdoor installation

Easy Installation

Light weight and flexible configuration

Energy Management

Monitor your system remotely via smartphone app or web portal

RH (3-6)K-EU

SINGLE-PHASE HIGH VOLTAGE RESIDENTIAL HYBRID INVERTER

MODEL	3KW	3.7KW	4KW	5KW	6KW
DC					
DC Input Power (KW)	3.9KW	4.68KW	5.2KW	6.5KW	7.8KW
Start-up Voltage (V)	80V				
Max.DC Voltage(V)	600V				
DC Voltage Range(V)	80V-600V				
MPPT Operating Voltage Range[V]/ Rated Voltage(V)	80V-550V/360V				
Max. Input Current [A]	15A				
No.of independent MPPT Trackers/No.of String per MPPT Tracker	2/1+1				
Grid-connected AC Side					
Rated Output Power(KW)	3KW	3.68KW	4KW	5KW	6KW
Max. Output Power [KVA]	3.3KVA	4.5KVA	4.5KVA	5.5KVA	6.5KVA
Max. Output Current [A]	15A	19A	21A	25A	26.5A
Output Voltage Range(V)	180V-280V/230V				
Grid Frequency [Hz]	50/60±5Hz				
Power Factor	1				
Power Factor Adjustment range	Adjustable from 0.8 leading to 0.8 lagging				
THDi	<3%				
Type Of Grid Connection	1+N+PE				
Off-grid AC side					
Rated Output Power(W)	6000W				
Rated Output Voltage(V)	230V				
Rated Output Frequency(Hz)	50Hz				

MODEL	3KW	3.7KW	4KW	5KW	6KW
Battery					
Battery Voltage Range (V)	85-450V				
Max. Charge Vottage(V)	450V				
Max. Charge Current (A)	40A				
Max. Charge Power (W)	4000W（Battery 0.5C）			5000W（Battery 0.5C）	
Connectable Battery Type	Li-Ion Battery				
Recommended Power(kWh)	5-15kWh				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97%				
MPPT Efficiency	99.80 %				
Other					
Security Level	Class I				
Protection	DC input switch, DC anti-reverse, battery reverse connection, output over-current, over-voltage, ground fault, over-temperature, abnormal grid voltage, abnormal frequency, etc.				
Protection Degree	IP65				
Operating Temperature Range (℃)	-25℃-+60℃				
Altitude / Noise (dB)/ Standby Consumption(W)	No Derating Below 2200m / ≤35dB / <4W				
Topology	Transformerless				
Cooling Method	Natural Cooling				
Communication Method	CAN, 485, Wifi, GPRS				
Inverter Communication With BMS	CAN and 485				
On-grid/off-grid Switching Time	≤10ms				
Safety	EN 62109-1, EN 62109-2				
EMC	EN 61000-6-2, EN 61000-6-3				
Grid Regulation	EN50549-1, C10 / 11, VDE-AR-N 4105, G98, G99, CEIO-21,NRS 097-2-1, AS / NZS 4777.2				



RH (7-10)K-EU

SINGLE-PHASE LOW VOLTAGE
RESIDENTIAL HYBRID INVERTER



Support diesel generator connection

Support Max. 16pcs parallel

Colorful touch LCD

IP65 protection degree

Max. charging/discharging current of 190A

Support remote control/ change settings without internet

RH (7-10)K-EU

SINGLE-PHASE LOW VOLTAGE RESIDENTIAL HYBRID INVERTER

MODEL	RH 7KEU	RH 8K-1PLVG1-EU	RH 9K-1PLVG1-EU	RH 10K-1PLVG1-EU
PV input				
Vmax PV (Vdc) (absolute Max.)	500	500	500	500
Max. PV input current / Isc PV (A)	26+26 / 34+34	26+26 / 34+34	26+26 / 34+34	26+26 / 34+34
No.of MPPT Trackers / Number input strings	2 / 2+2	2 / 2+2	2 / 2+2	2 / 2+2
MPPT voltage range (@ full power) (Vdc)	125-425 (240-425)	125-425 (240-425)	125-425 (240-425)	125-425 (240-425)
Power pv Max(W)	8800	10400	11200	12500
Battery (charge/discharge)				
Battery type	Li-ion/Lead-acid			
Battery Norma Voltage (Range) (Vdc)	48V (40-60V)			
Max charge/discharge Current(A)	160	190	190	190
Max charge/discharge Power(W)	7000	8800	8800	8800
AC Grid (input and output)				
Input/Output Frequency and Voltage	50 / 60Hz; 230Vac (single phase)			
Normal / Max. input/output current (A)	30.5 / 30.5	35 / 35	39.2 / 39.2	43.5 / 43.5
Max. cont. Power / Apparent Power (W/VA)	7000 / 7000	8000 / 8000	9000 / 9000	10000 / 10000
Power factor(adjustable)	1.0(-0.8~ +0.8)			
AC Load output (stand alone)				
Input/Output Frequency and Voltage	50 / 60Hz; 230Vac (single phase)			
Nominal Current(A)	30.5	35	39	43.5
Max. cont. Power / Apparent Power (kW/kVA)	7000 / 7000	8000 / 8000	9000 / 9000	10000 / 10000
Power factor(adjustable)	1.0(-0.8~ +0.8)			
Efficiency				
Max.Efficiency / Euro Efficiency / MPPT Efficiency	97.60% / 97.00% / 99.90%			
Protection				
Integrated Protection	PV Input Lightning Protection / Anti-islanding Protection / DC circuit breaker / PV String Input Reverse Polarity Protection / Insulation Resistor Detection / Residual Current Monitoring Unit / Output Over Current Protection / Output Shorted Protection / Output Over Voltage Protection			
Surge Protection	DC Typell/AC Type II			
Certifications and Standards				
Grid Regulation	VDE 0126,AS4777,NRS2017,G98,G99,IEC61683,IEC62116,IEC61727			
Safety Regulation	IEC62109-1,IEC62109-2			
EMC	EN61000-6-1.EN61000-6-3.FCC 15class B			
General Data				
Operating Temperature Range (C) / Protection Degree / Cooling / Noise (dB) / Protective class	-25~60C,>45C Derating / IP65 / Smart cooling / <30 dB / Class Iv			
Weight (kg)	30.5			
Size (mm)	410W×632H×238D			
Installation Style	Wall-mounted			
Warranty	5 years			





RH (8-10)K-US

Split-Phase Low Voltage
Residential Hybrid Inverter

Support Max.
16pcs Parallel

Support Remotely
Change Settings

IP65 Protection
Degree

Colorful
Touch LCD

Max. charging/
Discharging
Current of 190A

Support Diesel
Generator
Connection



RH (8-10)K-US

SPLIT-PHASE LOW VOLTAGE RESIDENTIAL HYBRID INVERTER

Model	RH5K-US	RH 6K-US	RH 7K-US	RH 8K-US	RH 9K-US	RH 10K-US
Battery Input Data						
Battery Type	Lithium-ion					
Max. Battery Charging/Discharging Power (W)	5500W	6600W	7700W	8800W	8800W	8800W
Battery Voltage Range (V)	48V（40~60V）					
Max. Charging Current (A)	130A	140A	160A	190A	190A	190A
Max. Discharging Current (A)	130A	140A	160A	190A	190A	190A
Charging Curve	3 Stages / Equalization					
External Temperature Sensor	Optional					
Charging Strategy for Li-Ion Battery	Self-adaption to BMS					
PV String Input Data						
Max. DC Input Power (W)	6500W	7800W	9100W	10400W	11700W	12500W
PV Input Voltage (V)	370V (100V~500V)					
MPPT Range (V)	125V-425V					
Full Load DC Voltage Range (V)	280V-425V					
Start-up Voltage (V)	150V					
PV Input Current (A)	15A+15A		15A+15A+15A			
Isc PV (absolute Max.) (A)	17A+17A		17A+17A+17A			
No.of MPPT Trackers	2		3			
No.of Strings Per MPPT Tracker	1					
AC Output Data						
Rated AC Output and UPS Power (W)	5000W	6000W	7000W	8000W	9000W	10000W
Max. AC Output Power (W)	5500W	6600W	7700W	8800W	9500W	10000W
Peak Power (off grid)	2 times of rated power, 10 S					
AC Output Rated Current (A)	21A	25.0A	29.3A	33.3A	37.5A	41.7A
Max. AC Current (A)	23A	27.5A	32.2A	36.6A	41.4A	41.7A
Max. Continuous AC Passthrough (A)	33A	40A	47A	53A	60A	67A
Output Frequency and Voltage	50 / 60Hz; 120 / 240Vac (split phase), 208Vac (2 / 3 phase)					
Grid Type	Split phase; 2 / 3 phase					
Current Harmonic Distortion	THD<3% (Linear load<1.5%)					
Efficiency						
Max. Efficiency	97.00%					
Euro Efficiency	96.50%					
MPPT Efficiency	99.90%					
Protection						
PV Input Lightning Protection	Integrated					
Anti-islanding Protection	Integrated					
PV String Input Reverse Polarity Protection	Integrated					
PV Arc Fault Detection	Integrated					
PV Rapid Shutdown Control	Integrated					
Insulation Resistor Detection	Integrated					
Residual Current Monitoring Unit	Integrated					
Output Over Current Protection	Integrated					
Output Shorted Protection	Integrated					
Output Over Voltage Protection	Integrated					
Surge protection	DC Type II / AC Type II					
Certifications and Standards						
Grid Regulation	UL1741, IEEE1547, RULE21,					
Safety Regulation	UL1741					
EMC	FCC 15 class B					
General Data						
Protective class	Class I					
Operating Temperature Range (℃)	-25~60℃, >45 ℃ Derating					
Cooling	FAN					
Noise (dB)	<40 dB					
Communication with BMS	RS485; CAN					
Weight (kg)	42					
Size (mm)	425W×645H×238D					
Protection Degree	IP65/NEMA 6					
Installation Style	Wall-mounted					
Warranty	5 years					