

## Single phase hybrid inverter RHS3~8KTL

MAX 97.6% EFFICIENCY

IP65 PROTECTION





Max. efficiency up to 97.6%

With AC output ranging from 3kW to 8kW



Powerful load adaptability, support multiple loads stable access



Oled display+App, two ways for data checking and management



100~500V super wide battery voltage range, adapt to bigger capacity battery



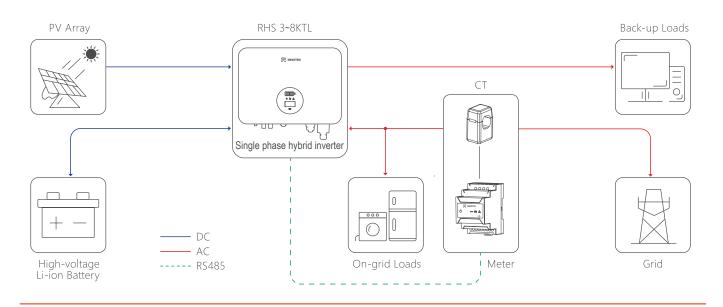
Up to 30A charging and discharging current allows bigger capacity battery accessing and faster charging



Intelligent EMS management, power dispatching from PV, Battery and Grid is more flexible



Uninterruptible power supply, switch to off-grid mode within 10ms







## **Technical parameters**

## Single phase: RHS3~8KTL

Model		RHS-3KTL-S	RHS-3.6KTL-S	RHS-4.2KTL	RHS-4.6KTL	RHS-5KTL	RHS-6KTL	RHS-7KTL	RHS-8KTL
	Max. Input Power (W)	3,900	4,680	5,460	5,980	6,500	7,800	9,100	10,400
	Start-up Voltage (V)	80	80	80	80	80	80	80	80
	Max. DC Input Voltage (V)	600	600	600	600	600	600	600	600
	Rated DC Input Voltage (V)	360	360	360	360	360	360	360	360
PV Input	MPPT Voltage Range (V)	100-550	100-550	100-550	100-550	100-550	100-550	100-550	100-550
	No. of MPP Trackers	1	1	2	2	2	2	2	2
	No. of PV Inputs per MPPT	1	1	1/1	1/1	1/1	1/1	1/1	1/1
	Max. Input Current (A)	15	15	15/15	15/15	15/15	15/15	15/15	15/15
	Max. Short-circuit Current (A)	20	20	20/20	20/20	20/20	20/20	20/20	20/20
	Battery Type	Lithium Battery (with BMS)							
Battery	Battery Communication Mode	CAN / RS485							
	Battery Voltage Range (V)	85-500							
	Max. Charge/Discharge Current (A)	30/30							
	Rated Current of Built-in Fuse (A)	63							
	Rated Output Power (W)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>®</sup>	6,000	7,000	8,000
	Max. Output Power (W)	3,300	3,960	4,600	4,600	5,500/4,990 <sup>©</sup>	6,600	7,700	8,000
	Max. Apparent Power (VA)	3,300	3,960	4,600	4,600	5,500/4,990 <sup>®</sup>	6,600	7,700	8,000
	Max. Input Apparent Power (VA)	6,000®	7,200 <sup>©</sup>	8,400 <sup>©</sup>	9,200 <sup>©</sup>	10,000 ②	12,000 <sup>②</sup>	12,000 <sup>②</sup>	12,000 <sup>©</sup>
	Max. Charging Power of Battery (W)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>®</sup>	6,000	7,000	8,000
Output (Grid)	Rated Output Voltage (V)	L/N/PE, 220/230/240V							
	Rated AC Frequency (Hz)	50/60							
	Max. Output Current (A)	15	18	21	21	25/21.7 <sup>©</sup>	28.7	35	36.3
	Power Factor	0.8 leading0.8 lagging							
	Max. Total Harmonic Distortion	<3% @Rated Output Power							
	DCI	<0.5%In							
	UPS Switching Time	< 10ms							
Output	Max. Apparent Output Power (VA)	3,300	3,960	4,600	4,600	5,500/4,990 <sup>©</sup>	8,800	11,000	13,200
(Back-up)	Peak Output Apparent Power (VA)	3,900 <sup>®</sup> , 60s	4,700 <sup>®</sup> , 60s	5,500 <sup>®</sup> , 60s	6,000 <sup>®</sup> , 60s	6,500 <sup>®</sup> , 60s	7,800 <sup>®</sup> , 60s	9,100 <sup>3</sup> , 60s	10,000 <sup>®</sup> , 60s
	Voltage Harmonic Distortion	< 3% @Linear Load							
Efficiency	Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
	European Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
	Max. Battery Charging Conversion Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%
	Max. Battery Discharge Conversion Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%

Protection				
DC Reverse Polarity Protection	Integrated			
Battery Input Reverse Connection Protection	Integrated			
Insulation Resistance Protection	Integrated			
DC Switch	Optional			
Surge Protection	Integrated			
Over-temperature Protection	Integrated			
Residual Current Protection	Integrated			
Islanding Protection	Frequency Shift, Integrated			
AC Over-voltage Protection	Integrated			
Overload Protection	Integrated			
AC Short-circuit Protection	Integrated			

General Data				
Over Voltage Category	PV : Ⅲ; Main : Ⅲ			
Dimensions (mm)	550W*410H*175D			
Weight (kg)	26			
Protection Degree	IP65			
Self-consumption at Night (W)	< 15			
Topology	Transformer less			
Operating Temperature Range (°C)	-30~60			
Relative Humidity (%)	0~100			
Operating Altitude (m)	4000 (derating@ > 3000)			
Cooling	Natural Convection			
Noise Level (dB)	< 25			
Display	OLED & LED			
Communication	WiFi / LAN (Optional)			

## Compliance

IEC62109、IEC62116、VDE4105、VDE0126、AS4777、RD1699、NBR16149、IEC617 27、IEC60068、IEC61683、EN50549、EN61000

- ① The grid feed in power for AS/NZS 4777.2 is limited 4.99kW & 4.99kW & 21.7A.
  ② Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery.
  ③ The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.

