

RHT-10~20K-40

Three-phase Hybrid Inverter

10kW / 12kW / 15kW / 20kW



Optimal power and storage

- 98.4% maximum efficiency
- 30A PV input current, 2 MPP trackers
- 110% unbalanced output
- 40A charge/discharge current

Strong load and back-up

- 110% continuous AC output overloading
- 200% maximum back-up output overloading @60s
- 10ms UPS-level switching
- 150% DC oversizing

Convenient installation and operation

- Plug & play terminals for easy wiring
- I-light, power and alarm indicator
- OLED display and app for setting and data management
- WiFi configuration via app

Flexible design and use

- 135~750V wide battery voltage range
- IP65 for indoor and outdoor installation
- Support paralleling up to 10 devices
- Compact size and elegant appearance

Technical Data
RHT-10K-40
RHT-12K-40
RHT-15K-40
RHT-20K-40
PV Input

Recommended maximum input power	15.0 kW	18.0 kW	22.5 kW	30.0 kW
Start-up voltage	135 V			
Maximum DC input voltage	1000 V			
Rated DC input voltage	620 V			
MPPT voltage range	200~950 V			
Number of MPP trackers	2			
Number of DC inputs per MPPT	2/2			
Maximum input current	30/30			
Maximum short-circuit current	40/40			

Battery Side

Battery type	Lithium Battery (with BMS)			
Battery voltage range	135~750 V			
Maximum charging/discharge current	40/40 A			

Grid Side

Rated output power	10.0 kW	12.0 kW	15.0 kW	20.0 kW
Maximum output apparent power	11.0 kVA	13.2 kVA	16.5 kVA	22.0 kVA
Maximum input apparent power	20.0 kVA	24.0 kVA	30.0 kVA	30.0 kVA
Maximum charging power of battery	10.0 kW	12.0 kW	15.0 kW	20.0 kW
Rated AC voltage	3L/N/PE; 220/380V;230/400V;240/415V			
Rated AC frequency	50/60 Hz			
Maximum output current	16.5 A	20.0 A	25.0 A	33.5 A
Power factor	0.8 leading ... 0.8 lagging			
Maximum total harmonic distortion	<3% @Rated output power			
DCI	<0.5%In			

Back-up Side

Rated output power	10.0 kW	12.0 kW	15.0 kW	20.0 kW
Maximum output apparent power	11.0 kVA	13.2 kVA	16.5 kVA	22.0 kVA
Maximum output current	16.5 A	20.0 A	25.0 A	33.5 A
UPS switching time	<10 ms			
Rated output voltage	3L/N/PE; 220/380V;230/400V;240/415V			
Rated output frequency	50/60 Hz			
Voltage harmonic distortion	<3% @Linear load			

Efficiency

Maximum efficiency	98.4%			
European efficiency	97.5%			

General Data

Protection	DC reverse polarity protection; Battery input reverse connection protection; Insulation resistance protection; Surge protection; Over-temperature protection; Residual current protection; Islanding protection; AC over-voltage protection; Overload protection; AC short-circuit protection			
Over voltage category	PV: II Main: III			
Ingress protection	IP65			
Standby self-consumption	<15 W			
Topology	Transformerless			
Operating temperature range	-30~60°C			
Relative humidity	0~100%			
Maximum working altitude	3000 m (>3000 m derating)			
Cooling concept	Smart fan			
Noise level	<40 dB			
Display	OLED & LED			
Communication	CAN, RS485, WiFi/LAN (Optional)			
Dimensions (WxDxH)	534x210x418 mm			
Weight	28 kg		31 kg	