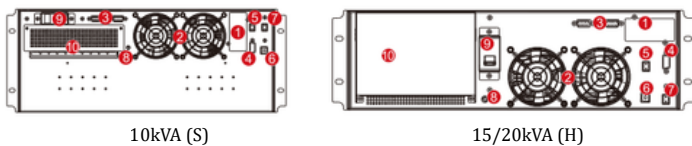


**10-20KVA  
3:1/1:1 RACK**

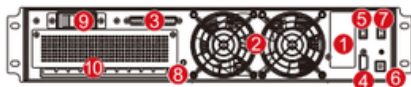


## Rear Panel

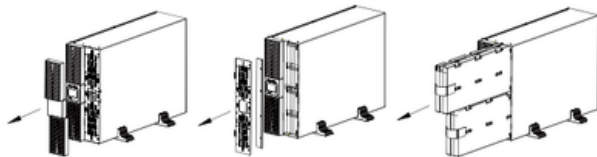


10kVA (S)

15/20kVA (H)



10kVA (H)



1. SNMP (Optional)
2. Fans
3. Parallel port (Optional)
4. RS232
5. EPO
6. USB (Optional)
7. Temperature Compensation (Optional)
8. GND
9. Bypass Breaker
10. Terminal and Cover

## Features

- High frequency on-line double conversion technology
- Advanced DSP and 3-level technology
- Output power factor 1.0
- Active power factor correction (APFC), input power factor up to 0.99
- High efficiency 95% (up to 98% in ECO mode)
- Advanced digital parallel technology
- 3:1 to 1:1 model settable
- Wide input voltage range (190 ~ 478 Vac) and frequency range (40 ~ 70 Hz)
- 50 / 60 Hz frequency auto sensing
- Two modes of frequency conversion: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Dual-input design, supporting independent bypass
- Hot swappable battery (for S model)
- Flexible battery configuration (settable 16 - 20 pcs batteries for H model)
- Digitally controlled charger
- High charging current available (Max. 10 A)
- Charging voltage and current configured by demands
- Linear derating in low voltage input reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic floating / equalizing charge control, charger dormancy control, increasing battery life by 50%
- Ability to switch on the UPS with batteries
- Settable delayed start time when mains power is restored, reducing the impact on power grid or generator
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Compact internal layout, miniaturized the complete unit for small footprint
- LCD+LED display, multi-functional keys operation, friendly human-machine interface
- Powerful background software for parameters configuration
- Advanced multi-platform communications: RS232, USB, RS485, SNMP and dry contacts communication interfaces
- Effective software and hardware protection function, robust self-diagnostic function, and abundant event log for check

## Available Options

- RS232 and smart card slot included
- Optional parallel function, battery temperature compensation, SNMP card, USB, RS485 card, dry contacts, and EMD.

## Spectifications

MODEL	HD9010RTS (3:1)	HD9010RTH (3:1)	HD9015RTH (3:1)	HD9020RTH (3:1)
Capacity	10 kVA/ 10 kW		15 kVA/ 15 kW	20 kVA/ 20 kW
<b>INPUT</b>				
Input wiring	Three-phase five-wire (3Φ + N + PE)			
Rated voltage	380 / 400 / 415 Vac			
Voltage range	190 ~ 304 Vac (linear derating between 50% and 100% load); 304 ~ 478 Vac (no derating)			
Rated frequency	50 / 60 Hz (auto-sensing)			
Frequency range	40 ~ 70 Hz			
Power factor	≥ 0.99			
Bypass voltage range	- 40% ~ + 15% (settable)			
THDi	≤ 5%			
<b>OUTPUT</b>				
Output wiring	Single-phase (L-N)			
Rated voltage	208 (PF=0.9) / 220 / 230 / 240 Vac			
Voltage regulation	± 1%			
Frequency	Synchronized to bypass in mains mode ; 50 / 60 Hz± 0.1% Hz in battery mode			
Waveform	Pure sine wave			
Power factor	1			
THDv	≤ 1 % (linear load); ≤ 3% (non-linear load)			
Crest factor	3:1			
Overload	105% ~ 110% for 10 min, 110% ~ 125% for 1 min, 126% ~ 150% for 30 s			
<b>BATTERIES</b>				
DC voltage	192 Vdc (192 ~ 240 Vdc settable)			
Number of battery	16 pcs (16 ~ 20 settable)			
Inbuilt battery (S model)	12V9Ah x 16	/	/	/
Charging current	S model: 1 A; H model: 5 A (default) ,1 ~ 5 A settable; 10 A (optional)			
Recharge time	S model : 90% capacity restored in 8 hours; H model: depend on the capacity of battery			
<b>SYSTEM</b>				
Efficiency	≥ 94% at 100% load, max. 95% at 60% load, ≥ 98% in ECO mode			
Transfer time	0 ms			
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure			
Max. number of parallel connections	4			
Communications	RS232, intelligent slot (standard). USB / RS485 / dry contacts / SNMP / battery temperature compensation (optional)			
Display	LCD+ LED			
<b>OTHERS</b>				
Operating temperature	0°C ~ 40°C			
Storage temperature	-25°C - 55°C (without battery)			
Relative humidity	0 - 95% (non-condensing)			
Altitude	≤ 1000 m, derating 1% for each additional 100 m			
IP rating	IP 20			
Noise level at 1 m	≤ 58 dB			
Dimensions (WxDxH)(mm)	440 x 660 x 176	440 x 650 x 88	440 x 780 x 132	
Net weight (kg)	67	17	25.5	

- All specifications are subject to change without notice
- Custom-made specifications are acceptable