

UPS online 1 phases

6 kVA ~ 10kVA

Tower PF 1.0

Features

- True online double-conversion design, 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
- Wide input voltage range (110~288 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
- Flexible battery configuration (settable 16 - 20 pcs batteries)
- Digitally controlled charger
- High charging current available (Max. 12 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, NMC/SNMP card, USB, RS485 card, dry contacts, PDU, EMD, and SMS alarms

Rear panel

1. RS232
2. EPO
3. Parallel port (optional)
4. USB (Optional)
5. Temperature detection (optional)
6. Intelligent slot
7. Reserved: for manual bypass or battery breaker or outlets ect.
8. Fans
9. Bypass breaker
10. Input breaker
11. GND
12. Terminals and Cover



6/10 kVA (H)



6/10 kVA (S)

Specification

MODEL	HD-6KP	HD-10KP
Capacity	6KVA / 6KW	10kVA/ 10kW
Operation modes	Normal, Battery, Bypass, ECO, Frequency converter, self aging	
INPUT		
Input wiring	Single-phase three-wire (1Φ + N + PE)	
Rated voltage	220/230/240Vac (Selectable)	
Voltage range	110-176Vac (linear derating between 50% and 100% load); 176-288Vac (no derating)	
Rated Frequency	50/60Hz (auto-sensing)	
Frequency range	40~70Hz	
Main input current	Max 60A	
Power factor	>0.99	
Bypass voltage range	-40% - +15% (settable)	
Total harmonic distortion (THDi)	≤ 5%	
Transfer to bypass	Auto transfer to bypass when UPS overload, fault	
Generator compatibility	Yes	
OUTPUT		
Output wiring	Single-phase	
Capacity	6kW	10kW
Rated Voltage	220/230/240 Vac	
Voltage regulation	±1%	
Frequency	Synchronized to bypass in mains mode; 50/60Hz (±0.1Hz in battery mode)	
Waveform	Pure sinewave	
Power factor	1.0	
Total harmonic distortion (THDv)	<1% (full linear load), <4% (full non-linear load)	
Transfer time	0ms	
Main output current	45.5A	
Crest factor	3:1	
Overload	Load at 110% transfer to bypass in 60min; Load at 125% transfer to bypass in 1min; Load at 150% transfer to bypass in 0.5min and shutdown after 1min	
Protections	Short circuit, Overload, over temperature, under voltage, over voltage,low battery, fan fault.....	
BATTERIES		
DC voltage	240 Vdc (192-240 Vdc settable)	
Number of battery	20pcs (16-20 settable)	
Battery type	VRLA Valve-regulated maintenance-free sealed lead-acid (AGM)	
Inbuilt battery (standard model)	12V / 7Ah *16	12V / 9Ah *16
Charging current	Standard model: 1A; Long time model: 5A (default); 1-5A settable, 12A (optional)	
Recharge time	Standard model: 90% capacity restored in 8h Long time model: depend on the capacity of battery	
SYSTEM		
Efficiency AC to AC	≥95%	
Max. number of parallel connections	4(optional)	
Communications	RS232/USB (standard) with UPS monitoring and management software, SNMP slot SNMP/NMC card, Dry contact, Modbus, Battery temperature compensation (optional) PDU (optional)	
Control	Microprocessor	
Display	LCD + LED Display and control in: Load, Battery, capacity, input-output mode, bypass mode, fault code....	
Alarm/ Flash	Battery, voltage, Fan fault	
OTHERS		
Operation temperature	0-40°C	
Storage temperature	-25-55°C (without battery)	

Relative humidity	5%-95% (non-condensing)	
Altitude	≤ 1000m, derating 1% for each additional 100m	
IP rating	IP 20	
Noise level at 1m	≤55dB	≤58dB
Dimensions (W*D*H),mm	191*465*350	191*495*350
Package Dimensions (W*D*H),mm	318*595*475	318*617*475
Net weight (kg)	14.5	16.5
Gross weight (kg)	16	18

• All specifications are subject to change without notice