

TOWER TYPE UPS

1KVA – 3KVA

PF 0.9

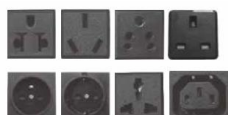


Features

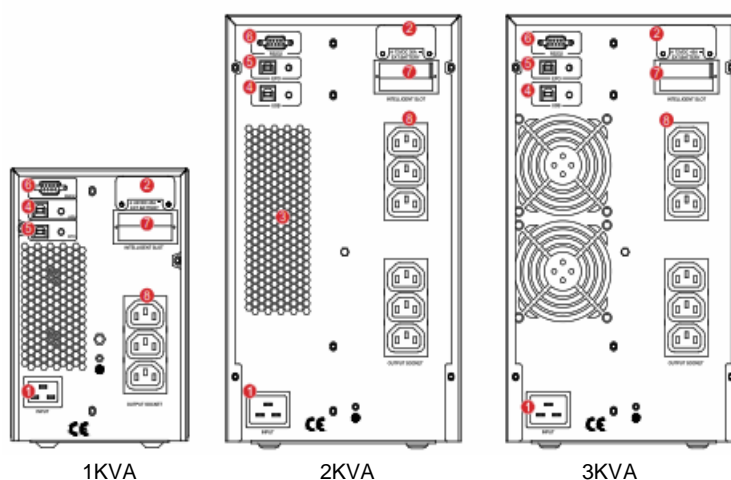
- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110V – 300Vac) and frequency range (40 – 70Hz)
- Auto-sensing frequency
- 50/60 Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Compact tower design
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional).
- SNMP (NMC) -Network Management Protocol provides a way to manage network devices by querying for information and issuing commands. It functions by sending requests to network devices, which then respond with the requested data or execute the requested action. The main functions include monitoring, configuration management, and event notifications. Schedule UPS administration. Save historical information, events, UPS status. Automatically send input/output, temperature, load, warning status reports via administrator email
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, EPO function

Rear panel

1. AC input socket
2. Battery connector (Optional)
3. Fan
4. USB (Optional)
5. EPO (Optional)
6. RS232
7. Intelligent slot (Optional)
8. Output sockets



Optional outlets



Specifications

MODEL	HD-3KTH
Capacity	3kVA / 2.7kW
INPUT	
Rated voltage	Single phase 2 wires + PE 208/220/230/240 Vac (Selectable) $\pm 10\%$
Voltage range	110-176Vac (linear derating between 50% and 100% load); 176-280Vac (no derating); 280-300Vac (derating 50%)
Frequency	40 – 70Hz (50/60Hz auto-sensing)
Power factor	≥ 0.99
Bypass voltage range	-25% - +15% (settable)
Total harmonic distortion (THDi)	$\leq 5\%$
Generator compatibility	Support
OUTPUT	
Voltage	Single phase 208/220/230/240 Vac (settable via LCD)
Voltage regulation	$\pm 1\%$
Frequency	45-55Hz or 55-65Hz (synchronized range); 50-60Hz $\pm 0.1\%$ Hz (battery mode)
Waveform	Pure sine wave
Power factor	0.9
Total harmonic distortion (THDv)	$\leq 2\%$ (linear load), $\leq 5\%$ (non-linear load)
Crest factor	3:1
Overload	$\leq 110\%$ continuous working; 110% ~ 130% for 1 min; 130% ~ 150% for 30s; >150% for 300ms. Transfer to bypass when overload and fault then shutdown
Socket	IEC C13 *3 +Ter or Universal +Ter
BATTERIES	
DC voltage	72V
Inbuilt battery	9Ah*6
Charging current (max.)	1A
Type	VRLA 12V (Sealed lead-acid maintenance free battery)
Backup time	≥ 11 minutes at 50% load/ 3~5 minutes at 100% load
Recharge time	Restored in ≥ 5 h
Charging technology	Advanced battery management (auto transfer to continuous charging). Prioritize slow charging to preserve battery life.
SYSTEMS	
Efficiency	$\geq 92\%$ (Mains mode)
	$\geq 87\%$ (Battery mode)
	$\geq 97\%$ (ECO mode)
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)
Protections with warning	Short-circuit, overload, overtemperature, low battery, battery discharge and fan testing protection
Communications	RS232 (standard) UPS monitoring software via RS232 connection-auto shutdown or control PC-server before UPS stop working; Build-in surge protection; USB/ RS485/dry contact/ SNMP (optional)
Display and control	LCD + LED Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode Ups operating status via LCD color: Load, battery, input, output, bypass, charging, discharging time, mute, fan, fault...; Load status: Load capacity 0-25%, 26-50%, 51-75%, 76-100%. When UPS is overload, the load icon will flash; LED warning with sound and flashing light when ups is wrong shutdown, bypass mode, overload, low battery, and UPS fault with warning continuously

Standards	EN 62040-1, EN 62040-2, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2, IEC 62040-2, IEC 62040-1, IEC 62040-3
OTHERS	
Operation temperature	0 – 45°C
Storage temperature	-25 – 55°C (without battery)
Relative humidity	0 – 90% (non-condensing)
Altitude	≤ 1000m, derating 1% for each additional 100m
IP rating	IP 20
Noise level at 1m	< 50dB
Dimensions (W*D*H),mm	191*419*335
Net weight (kg)	24.3

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