

Single phase online Tower case

PF 0.9/1.0

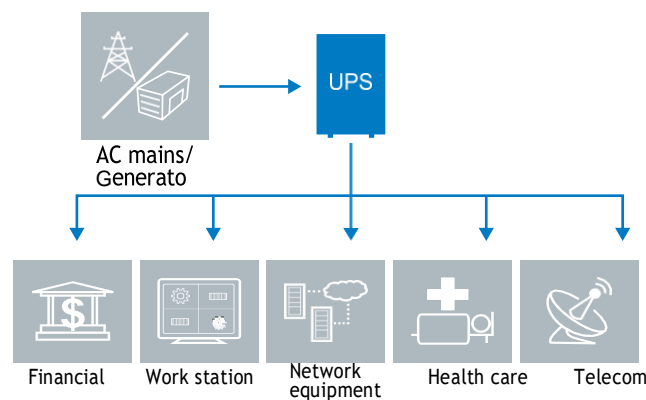
6KVA~10KVA



## Key features

- True online double-conversion design with high adaptability to harsh mains conditions
- PF=0.9/1.0
- DSP design enables precise and reliable control
- High efficiency results in energy saving
- Supports energy-saving ECO mode
- Compact size requiring small installation space
- Built-in OVCD(short-circuit) protection, fan lock detection, over temperature detection, overload warning to enhance the product reliability
- RS232 with UPS managements program via RS232 computer connection protocol
- Intelligent communication slot enables remote monitoring
- Programmable LCD display for quick UPS parameters configuration

## Typical application



**Product specifications**
**Serial 6KVA~ 10KVA**

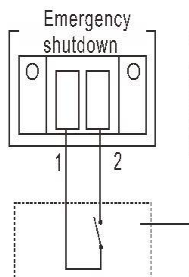
Model name		HD-6KTH	HD-6KTS	HD-10KTH	HD-10KTS
Power rating	kVA/kW or VA/Watt	6kVA/5.4kW		10kVA/9kW	
		6kVA/6kW		10kVA/10kW	
Efficiency	Double conversion mode	96%			
	ECO mode	98%			
Input performance	Phases	Single phase with ground			
	Rated voltage	208/220/230/240VAC(selectable)±10%			
	Voltage range	110-300Vac			
	Rated frequency	50Hz/60Hz(Auto-sensing)			
	Frequency range	40Hz-70Hz(50Hz: 44Hz-56Hz); 54Hz-66Hz(@ load>60%)			
	Max Current voltage	31.2A	38.7A	49.9A	57.6A
	PF	>0.99(100% load)			
	THDi	<3% full load			
	Bypass voltage range	-40%~+15%(settable)			
	Generator compatibility	Yes			
Input connection	Wiring/socket	Hardware terminnal connection(5 poles, IPL, IPN, PE, OPL, OPN)			
Output performance	Rated voltage	Single phase 208/220/230/240VAC(auto-sensing or settable)			
	Voltage accuracy	±1%			
	Rated frequency	50Hz/60Hz			
	Frequency range	Synchronized to bypass in mains mode; ±0.1% in battery mode			
	PF	0.9/1.0			
	THDv	<1% linear load <4% non linear load			
	Transfer time	0ms			
	Crest Ratio	max 3:1			
	Waveform	Pure sinewave			
	Overload(line mode)	100%<load≤105% continuous. >105%< load ≤115% load transfer to bypass mode after 10 minutes. >115<load≤130% % load transfer to bypass mode after 5 minutes. >130<load≤150% % load transfer to bypass mode after 30s.			
	Overload(Bypass mode)	100%<load≤105% no alarm. >105%< load ≤115% continous working and alarm. >115<load≤135% % UPS shutdown after 30s.			
Output connection	Wiring/socket	Hardware terminnal connection(5 poles, IPL, IPN, PE, OPL, OPN)			
Battery	Type	VRLA 12VDC Hyundai battery-synchronized with the UPS brand ( Sealed lead-acid maintenance free battery); ≥5years battery life			
	Voltage	192VDC(192-240VDC adjustable)			
	Capacity(AH)	16*12V/9Ah; 16-20pcs adjustable( KTH model)			
	Backup time at full load with PF0.8(inbuilt model)	6-8 mins		≥5 mins	
Max external BAT module		Max 6 battery modules can be expanded to increase the backup time			
Charger	Maximum charging current	1.4A(0-4A adjustalbe)	12A(0-12A adjustalbe)	2A(0-4A adjustalbe)	12A(0-12A adjustalbe)
	Recharging time	3h to 90%(KTH model)			
	Charging technology	Smart charging for automatic battery test, low battery warning, deep discharge			

Model name		HD-6KTH	HD-6KTS	HD-10KTH	HD-10KTS
Other working mode	Parallel capabilities	Optional (up to 3)			
	Setting Energy saving timer	Disable 1-10mins			
	Maintenance bypass switch	Yes			
Certification	Certification/standard	CE, IEC/EN 62040			
Operating	Operating modes	Online, battery, bypass, manual bypass, high efficiency			
	Display control	LCD graphical with five-button, color panel, controlled by (DSP) Digital signal processors control with measurements and settings: Load(W/VA)/Battery(time-minutes)/Input/Output/Frequency/Bypass/Operations mode/Events/ Fault... Parallel system BAT status( optional) LED indicator status with four- flash mode and buzzer: BAT mode/ Online mode/ Bypass mode/ Fault. When UPS wrong shutdown, low battery, low voltage, overload, fan fault.... Parallel cable loss( optional)			
	Protections	Short-circuit, overload, overtemp, over-voltage, under-voltage, low battery, fan failure....			
	Human-machine interface (HMI)	Standard for: RS232(DB9), EPO, Intelligent slot; RS232 with UPS managements program via RS232 computer connection protocol. Remote monitoring and control software via the RS232(Winpower software). Auto shutdown or control PC/server before UPS stops working; EPO: Emergency power-off; Intelligent slot: Network card connection slot as NMC long card or SNMP card; Optional for: SNMP- Intelligent card(Monitoring & system shutdown software) allow the UPS to communicate with different types of devices in variety of networking environments; RS485(Modbus card provides connection to Modbus protocol with standard RS485 signal); Relay card;			
Environment	Operating temperature	0-40°C( Full load no derating)			
	Relative Humidity	0-95%(non-condensing)			
	Operating Altitude	0-3000m (the load derating 1% every up 100m @1000-3000m)			
	Acoustic Noise	<50dBA(1m) @ typical load with battery fully charged		<55dBA(1m) @ typical load with battery fully charged	
Physical performance	Dimension(W*D*H)mm	220*492*589	220*492*348	220*492*589	220*492*348
	Net Weight(KG)	53	14	61	16
	IP protection level	IP20			
Accessory	RS232 cable	Yes			
	Manual	Yes, English and Vietnamese			

\*\*\* KTH means standard model. KTS means long time model

## EPO

The EPO (Emergency Power Off) is located in the back panel of the UPS and is a green terminal. The EPO can turn off the UPS power supply and turn off the UPS in the emergency condition.



The Specific use:

EPO interface is in the connection state UPS working normally.

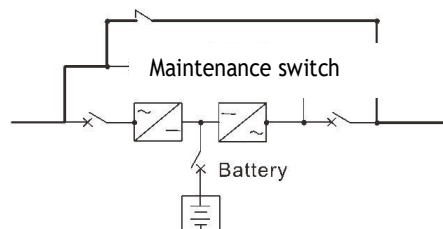
EPO interface is disconnected, UPS perform emergency shutdown and display 23 alarm.

User Switch

## Maintenance switches

Maintenance switch to achieve UPS online maintenance.

The main part of the UPS is charged, whether it is electricity, battery, bypass mode, and the UPS and electricity can be isolated by maintenance switch, and the safety of on-line repair of the UPS is guaranteed.



2023@version