

**UPS online**  
**10KVA – 60KVA**  
**(3:3)**  
**PF 1.0**



### Features

- High frequency online double conversion technology
- Advanced dual-core DSP control technology and 3-level technology
- Active power factor correction (APFC), input power factor up to 0.99
- System efficiency is improved to 95% and 96%, energy saving rate is doubled
- Support 3:1 configuration for 10KVA-40KVA (optional)
- Output power factor 1.0
- Dual input design, supporting independent bypass
- Advanced digital and parallel technology, providing higher reliability than single system
- Wide input voltage range
- 50 / 60 Hz auto-sensing frequency
- 50 / 60 Hz frequency conversion mode
- Work efficiency up to 98% in ECO mode
- Fan speed varies intelligently with load, reducing noise and extending its service life
- Conformal coating technology to make UPS operate in harsh environment for a long time
- Flexible battery configuration setting, selectable battery numbers: 32~ 40 pcs
- Digitally controlled charger
- Ability to switch on the UPS by battery in the absence of mains power (Cold start)
- Zero switching time for UPS power supply mode when the mains power is unstable, ensuring the output is uninterrupted
- Compact internal layout, small footprint
- 5 inches LCD colorful touch screen, friendly human & machine interface
- Powerful background software for parameters configuration and online upgrade
- Advanced multi-platform communication for UPS monitoring: RS232, USB, RS485, dry contacts, SNMP card, Wi-Fi card
- Linear derating in low voltage input, reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic equalized and float charging control, charger dormancy control, improving the reliability of charger and extending the battery life
- Effective hardware and software protection, robust self-diagnosis function, abundant event log for future check
- Standard RS232, USB, RS485, EPO, simple dry contacts, Parallel port
- Optional SNMP card, Wi-fi card

2024@version

## Specifications

MODEL	HD-10KH3/10Ki	HD-15KH3/15Ki	HD-20KH3/20Ki	HD-30KH3/30Ki	HD-40KH3/40Ki	HD-60KH3
Capacity	10KVA/10KW	15KVA/15KW	20KVA/20KW	30KVA/30KW	40KVA/40KW	60KVA/60KW
<b>INPUT</b>						
Rated voltage	380/400/415Vac (3PH+N+PE)					
Voltage range	304 – 476Vac, full load 228V – 304Vac, load decrease linearly according to the min phase voltage					
Rated frequency	50/60Hz (auto-sensing)					
Frequency range	40 – 70Hz					
Power factor	>0.99					
Bypass voltage range	Selectable, default -20%~+15% Up limited: +10%, +15%, +20%, +25%; Down limited: -10%, -15%, -20%, -30%, -40%					
Bypass frequency range	Selectable, ±1Hz, ±3Hz, ±5Hz					
Total harmonic distortion (THDi)	< 3% (linear load)					
Bypass overload	125%: Long term operation; 125%~130%: 10min; 130%~150%: 1min; 150%~400%: 1s; >400%, less than 200ms					
<b>OUTPUT</b>						
Rated voltage	380/400/415Vac (3PH+N+PE)					
Voltage regulation	± 1% (full linear load)					
Frequency	Synchronized with utility in mains mode, 50/60 Hz ±0.1% in battery mode					
Waveform	Pure sine wave					
Power factor	1.0					
Total harmonic distortion (THDv)	<1% (full linear load), <3% (full non-linear load according to IEC/EN62040-3)					
Crest factor	3:1					
Overload	<110%, 60min; 110%~125%,10min; 125%~150%,1min; >150%, 200ms					
<b>BATTERIES</b>						
DC voltage (KH3 model)	±240VDC (Selectable 32 - 40pcs) - Derate capacity to 90% when the q'ty of batteries is set to 32pcs for 40-60KVA					
Inbuilt battery (Ki model)	(10+10) x 9AH	(20+20) x 7AH	(20+20) x 9AH	(15+15) x 9AH x 2 strings	(20+20) x 9AH x 2 strings	/
Charging current	10A Max.			15A Max.		20A Max.
Charger Voltage precision	1%					
Recharge time	Ki models: 90% capacity restored in 8 hours; KH3 models: depend on the capacity of battery					
<b>SYSTEM</b>						
Efficiency	95% Max.			96% Max.		
Transfer time	0 ms					
Max. number of parallel connections	4					
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage, and fan failure					
Communications	RS232, USB, RS485, battery cold start (Standard). Programmable dry contact (dry contact card), SNMP card, parallel kit (Optional)					
Display	LED + 5 inches LCD touch screen					
<b>OTHERS</b>						
Operation temperature	0 – 40°C					
Storage temperature	-40°C – 70°C (without batteries)					
Relative humidity	0 – 95% (non-condensing)					
Altitude	< 1000m, Load derated 1% per 100m from 1000-2000m					
IP rating	IP 20					
Noise level at 1m	58dB Max.			62dB Max.		
Dimensions (W*D*H) mm	250*720*560 (Ki) 250*720*560 (KH3)	250*800*700 (Ki) 250*720*560 (KH3)		250*840*930 (Ki) 250*840*650 (KH3)	350*800*1280 250*720*560	250*790*560
Net weight (kg)	82 (Ki) / 31 (KH3)	131 (Ki) / 33 (KH3)	145 (Ki) / 33 (KH3)	215 (Ki) / 42 (KH3)	300 (Ki) / 42 (KH3)	48

- Ki means standard model, KH3 means long time model
- Custom-made specifications are acceptable
- All specifications are subject to change without notice