

## HYUNDAI UPS

40KVA

(3:3)

PF 1.0



## Features

- Advanced dual-core DSP control technology and 3-level technology
- Output power factor 1.0
- Active power factor correction (APFC), input power factor up to 0.99
- System efficiency is improved to 96%, energy saving rate is doubled
- Working efficiency up to 99% in ECO mode
- 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
- Compact internal layout, small footprint
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Features strong fault tolerance, one fan damaged takes 50% of the load, two fans damaged take 30% of the load
- Conformal coating technology to make UPS operate in harsh environment for a long time
- Effective hardware and software protection, robust self-diagnosis function, abundant event log for future check
- Linear downgrading in low voltage input, reducing battery discharging times
- Flexible battery configuration setting, selectable battery numbers: 30~ 44 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
- 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, EMP card, Wi-Fi card (Optional)
- Intelligent battery management, automatic equalized and float charging control, charger dormancy control, improving the reliability of charger and extending the battery life
- Options and accessories: RS232, USB, RS485, RJ45, Parallel, Dry contacts, EPO interfaces supplied; Optional SNMP card, EMP card, Wi-Fi card
- Standards: EN/IEC 62040-1, EN/IEC 62040-2, EN/IEC62040-3

## Specifications

MODEL	HD-40KH3
Capacity	40KVA/40KW
Technology	True online double-conversion technology
INPUT	
Input wiring	Three-phase five-wire (3 $\phi$ + N + PE)
Rated voltage	220/380Vac or 230/400Vac or 240/415Vac
Voltage range	304 – 485Vac (no downgrading), 108V – 304Vac (linear downgrading between 40%-100% load)
Rated frequency	50/60Hz (auto-sensing)
Frequency range	40 – 70Hz
Power factor	$\geq 0.99$
Bypass voltage range	-60% - +20%
THDi	< 3%
OUTPUT	
Output wiring	Three-phase five-wire (3 $\phi$ + N + PE)
Rated voltage	220/380Vac or 230/400Vac or 240/415Vac
Voltage regulation	$\pm 1\%$ (static load)
Frequency	Synchronized with utility in mains mode, 50/60 Hz $\pm 0.1\%$ in battery mode
Waveform	Pure sine wave
Power factor	1.0
THDv	$\leq 1\%$ (linear load); $\leq 4\%$ (non-linear load)
Crest factor	3:1
Overload	105% - 110% for 60min; 110%~125% for 10min; 125%~150% for 1min; >150% for 0.2s
BATTERIES	
DC voltage	$\pm 192\text{Vdc}$ default ( $\pm 180 \sim \pm 264 \text{ Vdc}$ Settable).
Number of battery	32 pcs 12V VRLA batteries (30~44 pcs settable)
Charging current (max.)	12A
Recharge time	Depend on the capacity of battery
SYSTEM	
Efficiency	Max. 96% in online mode, 99% in ECO mode
Transfer time	0 ms
Protections	Short-circuit, overload, overtemperature, excessive low battery, overvoltage, undervoltage, fan failure
Max. number of parallel connections	4
Communications	Standard configuration: RS232, USB, RS485, Dry contacts Optional configuration: SNMP card, EMP card, Wi-Fi card
Display	5 inches colorful LCD touch screen including main menu, energy flow diagram, status bar displaying: operating modes, load, input (voltage, current, frequency), output (voltage, current, frequency), bypass, battery (voltage, current, status, remaining capacity, temperature with EMP card) Alarms: End User can check "Active alarm", "Fault record", "Status record" and "Operating record". Display the system history with 1000 events
Static bypass and maintenance bypass switch	Yes
OTHERS	
Operation temperature	0 – 40°C
Storage temperature	-25°C – 55°C (without battery)
Relative humidity	0 – 95% (non-condensing)
Altitude	$\leq 1000\text{m}$ ; above 1000m, downgrading 1% for each additional 100m
IP rating	IP 20
Noise level at 1m	$\leq 65\text{dB}$
Dimensions (W*D*H) (mm)	360*850*885
Net weight (kg)	95

• All specifications are subject to change without notice  
• Derate capacity to 90% when the number of batteries is set to 30pcs

• Custom-made specifications are acceptable