

HWE990 G4

40 kVA ~ 120 kVA
(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 Technology, input power factor up to 0.99
- System efficiency 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 Hz / 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 (Max. 36 A)
- 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
- Settable delayed start time when mains power is restored
- 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, NET, dry contacts, SNMP card, Wi-Fi card and GPRS card
- 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, NET, parallel, LBS, dry contacts, EPO and battery temperature compensation interfaces supplied; optional SNMP card, Wi-Fi card, GPRS card, battery temperature sensor, EMD detector and SMS alarms

Specifications

| MODEL | HW9940 | HW9960 | HW9980 | HW99100 | HW99120 |
|--------------------------------------|---|------------------|------------------|------------------|------------------|
| Capacity | 40 kVA / 40 kW | 60 kVA / 60 kW | 80 kVA / 80 kW | 100 kVA / 100 kW | 120 kVA / 120 kW |
| INPUT | | | | | |
| Input wiring | Three-phase five-wire (3Φ + N + PE) | | | | |
| Rated voltage | 380 / 400 / 415 Vac | | | | |
| Voltage range | 304 ~ 485 Vac (no downgrading), 138 ~ 304 Vac (linear downgrading between 40% ~ 100% load) | | | | |
| Rated frequency | 50 / 60 Hz (auto-sensing) | | | | |
| Frequency range | 40 ~ 70 Hz | | | | |
| Power factor | ≥ 0.99 | | | | |
| Bypass voltage range | -60% ~ +20% (settable) | | | | |
| Total harmonic distortion (THDi) | ≤ 3% | | | | |
| OUTPUT | | | | | |
| Output wiring | Three-phase five-wire (3Φ + N + PE) | | | | |
| Rated voltage | 380 / 400 / 415 Vac | | | | |
| Voltage regulation | ± 1% | | | | |
| Frequency | Synchronized with utility in mains mode, 50 / 60 Hz ± 0.1% in battery mode | | | | |
| Waveform | Sinusoidal | | | | |
| Power factor | 1 | | | | |
| Total harmonic distortion (THDv) | ≤ 1% (linear load); ≤ 4% (non-linear load) | | | | |
| Crest factor | 3:1 | | | | |
| Overload | 105% ~ 110% for 60 min, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, > 150% for 0.2 s | | | | |
| BATTERIES | | | | | |
| DC voltage | ± 192 Vdc (± 180 ~ ± 264 Vdc settable) 40 kVA built-in battery: ± 240 Vdc (80 pcs 9 Ah/12 V) | | | | |
| Number of battery | 32 pcs (30 ~ 44 pcs settable) | | | | |
| Charging current (max.) | 12 A | 24 A | | 36 A | |
| 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, fans failure | | | | |
| Max. number of parallel connections | 4 | | | | |
| Communications | Standard configuration: RS232, USB, RS485, NET, dry contacts; Optional configuration: SNMP card, Wi-Fi card, GPRS card | | | | |
| Display | 5 inches colorful LCD touch screen | | | | |
| OTHERS | | | | | |
| Operating temperature | 0°C ~ 40°C | | | | |
| Storage temperature | -25°C ~ 55°C (without battery) | | | | |
| Relative humidity | 0% ~ 95% (non-condensing) | | | | |
| Altitude | ≤ 1000 m; above 1000 m, downgrading 1% for each additional 100 m | | | | |
| IP rating | IP 20 | | | | |
| Noise level at 1 m | ≤ 65 dB | | | | |
| Dimensions (W × D × H) (mm) | 360 × 850 × 885 | 360 × 850 × 950 | 360 × 850 × 1200 | 440 × 850 × 1200 | |
| Packaged dimensions (W × D × H) (mm) | 450 × 940 × 1055 | 450 × 940 × 1120 | 450 × 940 × 1370 | 530 × 940 × 1370 | |
| Net weight (kg) | 95, 295 (built-in BAT) | 130.5 | 156 | 198 | |
| Gross weight (kg) | 110, 310 (built-in BAT) | 145 | 172 | 218.5 | |

- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.
- Derate capacity to 90% when the number of batteries is set to 30 pcs.