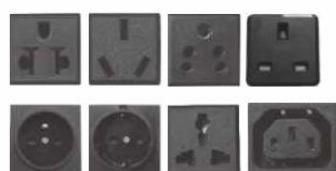
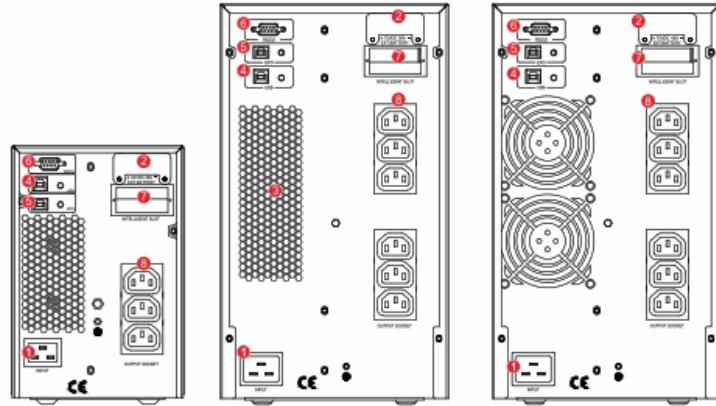


HYUNDAI UPS**1KVA – 3KVA****PF 0.9****Features**

- 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
- Quick and stable charging, 90% capacity restored in 4h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- 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)
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, EPO function, and 12 A charger (for 2/3 kVA long run model only)

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-1KT9 | HD-1KS | HD-2KT9 | HD-2KS | HD-3KT9 | HD-3KS | | | | |
|----------------------------------|--|-------------|----------------------------|-------------|----------------------------|-------------|--|--|--|--|
| Capacity | 1 kVA / 900W | | 2 kVA / 1800W | | 3 kVA / 2700W | | | | | |
| INPUT | | | | | | | | | | |
| Rated voltage | 208 / 220 / 230 / 240 Vac | | | | | | | | | |
| Voltage range | 110-176Vac (linear derating between 50% and 100% load); 176-280Vac (no derating); 280-300Vac (derating 50%) | | | | | | | | | |
| Frequency | 40 – 70Hz (auto-sensing) | | | | | | | | | |
| Power factor | ≥ 0.99 | | | | | | | | | |
| Bypass voltage range | -25% - +15% (settable) | | | | | | | | | |
| Total harmonic distortion (THDi) | $\leq 5\%$ | | | | | | | | | |
| OUTPUT | | | | | | | | | | |
| Voltage | 208 / 220 / 230 / 240 Vac (settable via LCD) | | | | | | | | | |
| Voltage regulation | $\pm 1\%$ | | | | | | | | | |
| Frequency | 45-55Hz or 55-65Hz (synchronized range); 50-60Hz $\pm 0.1\text{Hz}$ (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 | 105 – 125% for 1 min; 125-150% for 30s; >150% for 300ms | | | | | | | | | |
| BATTERIES | | | | | | | | | | |
| DC voltage | 36V | | 72V | | 96V | | | | | |
| Inbuilt battery | 3*7Ah | / | 6*7Ah | / | 8*7Ah | / | | | | |
| Charging current (max.) | 1A | 6A | 1A | 6A | 1A | 6A | | | | |
| Recharge time | Standard model: 90% capacity restored in 4h; Long time model: depend on the capacity of battery | | | | | | | | | |
| SYSTEM | | | | | | | | | | |
| Efficiency | $\geq 90\%$ (Mains mode) | | $\geq 91\%$ (Mains mode) | | $\geq 92\%$ (Mains mode) | | | | | |
| | $\geq 85\%$ (Battery mode) | | $\geq 86\%$ (Battery mode) | | $\geq 87\%$ (Battery mode) | | | | | |
| | $\geq 95\%$ (ECO mode) | | $\geq 96\%$ (ECO mode) | | $\geq 97\%$ (ECO mode) | | | | | |
| Transfer time | Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical) | | | | | | | | | |
| Protections | Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection | | | | | | | | | |
| Communications | RS232 (standard), USB/RS485/dry contacts/SNMP (optional) | | | | | | | | | |
| Display | LCD + LED | | | | | | | | | |
| 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 | $0 - 40^\circ\text{C}$ | | | | | | | | | |
| Storage temperature | $-25 - 55^\circ\text{C}$ (without battery) | | | | | | | | | |
| Relative humidity | $0 - 95\%$ (non-condensing) | | | | | | | | | |
| Altitude | $\leq 1000\text{m}$, derating 1% for each additional 100m | | | | | | | | | |
| IP rating | IP 20 | | | | | | | | | |
| Noise level at 1m | $\leq 50\text{dB}$ | | | | | | | | | |
| Dimensions (W*D*H),mm | 144*317*216 | 144*336*216 | 191*419*335 | 191*418*335 | 191*419*335 | 191*418*335 | | | | |
| Net weight (kg) | 12.8 | 6 | 23.1 | 10.5 | 29.4 | 11 | | | | |

- Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208 Vac

- KT9 means standard model, KS means long time model

- All specifications are subject to change without notice

- Custom-made specifications are acceptable