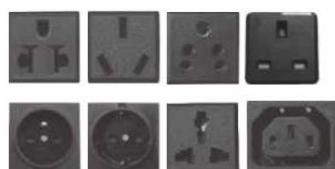
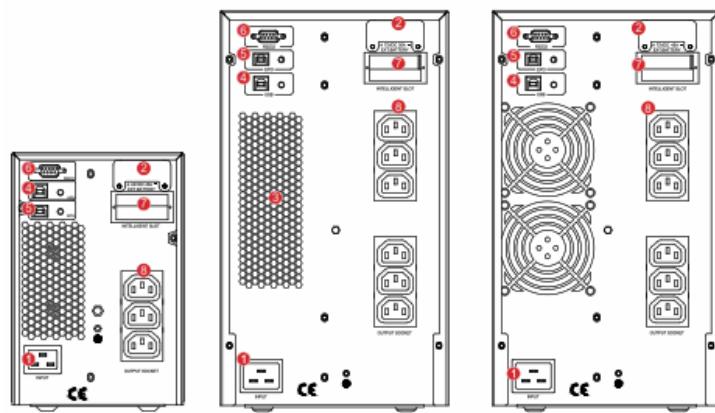


**HYUNDAI UPS****1KVA – 3KVA****PF 0.9****Features**

- 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					
<b>INPUT</b>										
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	$\geq 0.99$									
Bypass voltage range	-25% - +15% (settable)									
Total harmonic distortion (THDi)	$\leq 5\%$									
<b>OUTPUT</b>										
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									
<b>BATTERIES</b>										
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									
<b>SYSTEM</b>										
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/dty contact/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									
<b>OTHERS</b>										
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