

## SPECIFICATION FOR SERIES ONLINE UPS 1 TO 3KVA

HYUNDAI MODEL	HD-1K1	HD-2K1	HD-3K1			
Rated Power	1KVA/800W	2KVA/1600W	3KVA/2400W			
Type	Single Phase Input - Single Phase Output					
Technology	DSP Based High Frequency design using IGBT					
<b>INPUT PARAMETERS</b>						
No. of Phases	1 Phase, 3 Wire (P,N,E)					
Voltage Range	When load < 60%, Input Range is 115 ~ 295VAC ± 5VAC					
	When load > 60%, Input Range is 160 ~ 295 ± 5VAC					
Frequency Range	50Hz ± 5Hz					
Input Power Factor	>0.97					
<b>OUTPUT PARAMETERS</b>						
No. of Phases	1 Phase, 2 Wire (P,N)					
Voltage Range	220/230VAC ± 2%					
Frequency Range	Synchronized with the utility on AC mode; 50Hz ± 0.2% on Battery Mode					
Waveform	100% Pure Sine Wave					
THD (linear load)	<3%					
THD (non-linear load)	<6%					
Overload Capability	>110%, 30s turn to Bypass Mode					
	>150%, 200ms turn to Bypass Mode					
Load Crest Factor	3:1 (Max)					
Short Circuit Protection	5 cycles turn off Online, no transfer to bypass, Provide alarm (AC mode)					
	5 cycles turn off Online, Provide alarm (battery mode) Input fuse blown or breaker action (bypass)					
Transfer Time	Between AC Mode and Battery Mode : 0ms					
	Between AC Mode and Bypass Mode 4ms (typical value 2.5ms)					
Peak Efficiency	>83%		>85%			
<b>BATTERY PARAMETERS</b>						
Battery Recommendation	High Quality Deep Discharge Lead Acid Maintenance-free VRLA, AGM Battery					
Configuration	7AH ≤ 12V Internal Battery =>9AH or 7AH ≤ 12V External Battery =>200AH					
Battery String Voltage	36VDC	36VDC	48VDC	96VDC	72VDC	96VDC
Number of 12V Batteries	3	3	4	8	6	8
Charging Technology	Advance Battery Management (ABM) Function, Automatically convert to constant-current constant-voltage charging technology.					
Charge Current	1A (Internal Battery) or 7A ± 1Amp (External Battery)					
Recharge Time	90% Capacity - After 5hrs Charging (Internal Battery) Or 8hrs Charging (External Battery)					
Back up Time	> 5 min (Internal Battery) or 2Hr ~ 4Hr at Full Load (External Battery)					
<b>INDICATION &amp; COMMUNICATION</b>						
Communication Interface	Smart RS232 Communication with Monitoring Software (SNMP Optional)					
Parallel Port	NA					
Functions & Protection	Over Load, Short Circuit, Reverse Phase, Low Battery, Battery Deep Discharge, Battery Charged, Battery Charging, Over Temperature, Mains / Back-up Mode etc					
LCD	Input Voltage / Frequency, Battery Voltage, Output Voltage / Frequency, Load Watt/VA and Percent, Temperature					
	Operation Mode such as "on line", "on batt", or "or bypass"					
LED	Green LED for Normal Operation ; Yellow LED for Warning Condition ; Red LED for Abnormal Operation					
Bypass	Manual / Automatic					
<b>ENVIRONMENTAL PARAMETERS</b>						
Storage Temperature	25 ~ 55°C					
Operating Temperature	0 ~ 40°C					
Acoustic Noise at 1Mtr.	<55db					
Relative Humidity	0 ~ 90% Non Condensing					
Thermal Management	Integrated Cooling (Fan & Heat Sink) with excellent Aerodynamic Design					
<b>PHYSICAL PARAMETERS</b>						
Dimensions - Physical / Packing (WxDxH) in mm	144×419×215		191×478×339			
	258×524×334		332×603×482			
Weight - Net / Gross (Kgs)	8/10Kg		14/16Kg		15/17Kg	