

# HYUNDAI UPS CLASS B - 48 VDC HEAVY DUTY

## LONG BACKUP TIME LINEINTERACTIVE UPS

High MTBF & heavy duty design

DC to AC galvanic isolation with iron transformer

Hot swappable battery replace by user

External battery connection for long backup time

Input high impedance protection

Mains connection to ups output protection

Advanced Battery Management (ABM) & Spot Charge Management (SCM)

SNMP Management capability (optional)

### Construction

Model catalogue reference	SB2-2000	SB2-3000	SB2-5000	Declared
Model rating	1400/2000	2100/3000	3500/5000	W/VA
Dimensions W*D*H	192*440*270			mm
Weight (approx)	24	30	39	kg

### Environmental

Storage temperature	-20 to 70	Degree(Celsius)
Operating temperature	0 to 40	Degree(Celsius)
Altitude	-300 to 3000	M
Relative humidity	0 to 95 without condensation	%
Degree of protection	20 (IEC 60529)	IP
Normal mode acoustic noise at 1 m	<50	dBA
Stored energy mode acoustic noise at 1 m	<50	dBA

### Electrical input characteristics

Nominal AC voltage	220	V r.m.s
Voltage range	170 to 255	V r.m.s
frequency range	150 to 270 (software adj)	
Phase	47 to 53 (software adj)	Hz
	single	

### Electrical output characteristics

Nominal AC voltage	220	V r.m.s
Voltage variation(+/-)	220 +/- 0.5% (Free running)	
	220 +/- 7% (Synchronous with input)	V r.m.s
Nominal frequency	50	Hz
Frequency variation(+/-)	50+/-0.01 (Free running)	Hz
Linear load total distortion	Be synchronous with input in the mains mode	%THD
Non Linear load total distortion	<3%	%THD
Waveform	Sinusoidal	
Efficiency	>97	%
Overload capacity	150% @ starting , 120% @ 100 sec	
Transfer time	0.00	Sec

### Battery characteristics

DC voltage	48	vdc
Type	Sealed lead acid battery (Maintenance free)	
Maximum charging current	8	12
		20 (A) software adj

### Communication interface

Serial port (RS - 232) , SNMP (option)

### Protections

Battery over/under voltage and quantity	audible alarm and LCD showing
Battery disconnection	audible alarm and LCD showing
Battery disconnection inrush current	with DC soft start
Battery reverse polarity	audible alarm and LCD showing
Mains connection to ups output	shutdown after audible alarm and LCD showing
Two phase (400 V) connection to ups input	audible alarm and LCD showing
Overload	shutdown after audible alarm and LCD showing
Output short circuit	shutdown after audible alarm and LCD showing
Earth fault	audible alarm and LCD showing
Ups powers and transformers overheat protection	audible alarm and LCD showing and sometimes shutdown
Back feed protection automatic	
Advanced Battery Management (ABM) & Spot Charge Management (SCM)	
Input high impedance protection	
Tel / Modem internet spike protection	
DC to AC galvanic isolation	

### Electromagnetic compatibility

Immunity & emission

IEC 62040-2