

SUNBEE H Series (6-10KVA)

1-Ph In 1-Ph Out Off Grid MPPT Solar PCU

Model No.	SBH6000	SBH7500A	SBH7500B	SBH10000A	SBH10000B	
Ratings	6.0 KVA	7.5 KVA	7.5 KVA	10 KVA	10 KVA	
Switching Element	IGBT					
Inverter Charger Topology	Boost					
Solar Charger Topology	IGBT Based MPPT Buck Converter					
Controller	16-Bit dsPIC					
Max. Battery Capacity	200AH					
Inverter Priority Mode [Grid, Solar, Battery]	G»S»B	S » G » B (Default)				
	S»G»B					
	S»B»G					
PV Parameters (With Inbuilt MPPT Charge Controller)						
Solar Input Voltage Range(Min - Max)	165V-400V	165V-400V	210V-500V	210V-500V	315V-650V	
Maximum Solar Current	50A	75A	65A	80A	55A	
Nominal DC	96V	96V	120V	120V	180V	
Inverter Parameters						
Output Voltage	230V ± 2% , 1φ					
Maximum Output Current	20A	25A	25A	33A	33A	
Output Frequency	50Hz ± 1					
Isolation Transformer	Provided Inbuilt					
Crest Factor	3:1					
Output Waveform	Pure Sinusoidal					
THD	Linear Load	< 3%				
	Non Linear Load	< 5%				
Overload	> 100%, 30 Seconds					
Inverter Efficiency	> 85%					
Changeover Time	Battery to Mains	< 10ms				
	Mains to Battery	< 12ms				
Protections & Alarm	Over and undervoltage Solar/Grid, Over Load, Battery Low & High , Short Circuit, PV Reverse, Over Temperature					
Remote Monitoring Port RS232/RS485 (Modbus)	Optional					
Grid Input Parameters						
Nominal Grid Voltage	230V, 1φ					
Nominal Grid Frequency	50Hz					
Input Low Cut Voltage	170V ± 5V					
Input Low Recovery Voltage	> 180V ± 5V					
Input High Cut Voltage	270V ± 5V					
Input High Recovery Voltage	< 260V ± 5V					
Input Frequency Range	47Hz - 53Hz					
Battery Parameters						
Battery Charging	Grid	12A ± 1A				
	Solar	15A ± 1A				
Boost Voltage	Grid	116V ± 1V	116V ± 1V	145V ± 1V	145V ± 1V	217V ± 2V
	Solar	117V ± 1V	117V ± 1V	147V ± 1V	147V ± 1V	220V ± 2V
Float Voltage	Grid	108V ± 1V	108V ± 1V	135V ± 1V	135V ± 1V	202V ± 2V
	Solar	109V ± 1V	109V ± 1V	137V ± 1V	137V ± 1V	204V ± 2V
Equalization Voltage	Grid	124V ± 1V	124V ± 1V	160V ± 1V	160V ± 1V	232V ± 2V
	Solar	125V ± 1V	125V ± 1V	162V ± 1V	162V ± 1V	234V ± 2V
Battery Low Buzzer	86V ± 1V	86V ± 1V	107V ± 1V	107V ± 1V	160V ± 2V	
Battery Low Cut	85V ± 1V	85V ± 1V	105V ± 1V	105V ± 1V	157V ± 2V	
Battery Low Reconnect	94V ± 1V	94V ± 1V	117V ± 1V	117V ± 1V	177V ± 2V	
Battery High	136V ± 1V	136V ± 1V	170V ± 1V	170V ± 1V	255V ± 2V	
Display Parameters	LCD display for Input & Output - Voltage, Current & Frequency, Battery - Voltage & Current, Solar Voltage & Current					
Display Alarms	Output load Percentage, Overload time, Grid - On / Fail / High / Low , DC - On / High, Battery - Low Pre-alarm / Low Trip Inverter - On / Trip / High / Low / Over Load, Temperature					
Switchgear	Grid MCB, Battery MCB, Solar MCB, Manual Bypass Switch					
Enclosure	IP 20					
Operating Temp.	0 to 40 Deg C					
Humidity	Upto 95% Rh (non-condensing)					
Cooling	Forced Air					
Noise	< 55 dB, distance 1 meter					
Dimensions in mm (L X W X H)	600 X 350 X 480	700 X 350 X 570				
Weight(Approx Kgs)	75 Kg	78 Kg	78 Kg	90 Kg	90 Kg	
Bypass Switch	Satatic Switch					
Wheels	Provided					