TECHSER POWER SOLUTIONS PVT. LTD.					
OFF-GRID SOLAR PCU TECHNICAL SPECIFICATION					
S.No	**DESCRIPTION**	**TECHNICAL SPECIFICATION**			
1	**POWER CAPACITY**	**1000 W**	**1500 W**	**2000 W**	**3000 W**
	GRID INPUT				
2	Input Nominal Voltage	230V AC, 50 Hz			
	INPUT VOLTAGE RANGE				
3	INVERTER MODE	140V AC TO 270V AC ± 5V			
4	UPS MODE	185V AC TO 260V AC ± 5V			
5	Input Frequency (Hz)	50 Hz ± 3 Hz			
6	Technology	Digital Signal Processor Controlled High Performance Mosfet Based PWM Technology			
7	Switching Topology	Full Bridge Sinewave Inverter			
	BATTERY				
8	DC Voltage	24V / 48V / 72V	24V / 48V / 72V	48V / 72V	48V / 72V
9	Grid Charger control	Constant Voltage Constant Current			
10	Grid Charging Current	3A to 16A DC [settable]			
	OUTPUT @ BATTERY MODE				
11	Output Voltage	230V AC ± 5%			
12	Output Frequency	50 Hz ± 0.1 Hz			
13	Output Waveform	Sine wave			
14	Inverter Efficiency @100% load	≥ 80% FOR 24V DC ≥ 85% FOR 48V DC	≥ 80% FOR 24V DC ≥ 85% FOR > 24V DC	≥ 80% FOR UPTO 48Vdc ≥ 85% FOR > 72V DC	≥ 80% FOR UPTO 72V DC ≥ 85% FOR > 72V DC
15	Change Over Time	≤ 12 ms on UPS Mode & ≤ 18 ms on INV Mode			
16	OUTPUT FULL LOAD CURRENT	4.3A - 4.6A AC	6.5A - 6.8A AC	8.6A - 8.9A AC	13A - 13.3A AC
17	OUTPUT OVER LOAD	110% for 15 Secs			
	OUTPUT THD				
18	FOR LINEAR LOAD	≤ 3 %			
	ELECTRONIC PROTECTION				
19	Mains Low Voltage Cut-off	AVAILABLE			
20	Mains High Voltage Cut-off	AVAILABLE			
21	Battery Low Trip	Trip with Pre Alarm			
22	Over Load	Trips with Pre Alarm & Auto Restart 2 Times			
23	Output Short Circuit	Trips with Pre Alarm & Auto Restart 2 Times			
24	Mains / Inverter Output Reversal	Trips with Indications.			
	PROTECTION				
25	Mains	MCB / Fuse			
26	Battery	Fuse			
	INDICATIONS FOR INVERTER				
27	Mains ON / Charger ON	LED INDICATION			
28	Inverter ON				
29	Over Load				
30	Battery Low				
31	Solar ON				
	ALARM				
32	Battery Low Pre Alarm	Audible Alarm			
33	Over Load Pre Alarm	Audible Alarm			
34	No Load Loss	≤ 125 WATTS			
35	**SOLAR PHOTOVOLATIC PANEL VOLTAGE INPUT [RANGE] *** [SEE NOTE]				
	For 24V	30V to 45V			
	For 48V	60V to 90V			
	For 72V	90V to 135V			
36	Efficiency @100% load	≥ 94%			
37	Technology	Micro Controller Controlled High Frequency PWM Switching High Efficent MPPT Converter			
38	Topology	MOSFET / IGBT			
39	MPPT Logic Function	SOLAR-GRID-BATTERY [SGB] / SOLAR-BATTERY-GRID [SBG]			
40	GRID Charger Mute Options	ON / OFF			
41	MPPT Output Voltage	13.5V to 13.8V DC Per Battery			
42	MPPT Charging Mode	Constant Voltage Constant Current			
43	MPPT Charging Current Auto Solar mode / Mains Mode Selectable	2A - 24 Amps [Settable] AVAILABLE			
	PROTECTION				
45	Solar Input	Fuse			
46	Battery	Fuse			
	SOLAR STATUS [display]				
47	PANEL VOLT	AVAILABLE			
48	PANEL CURRENT	AVAILABLE			
49	SOLAR POWER	AVAILABLE			
50	BATTERY VOLTAGE	AVAILABLE			
51	BATTERY CHARGING / DISCHARGING CURRENT	AVAILABLE			
52	BATTERY POWER	AVAILABLE			
53	LOAD ON SOLAR / BATTERY / GRID	AVAILABLE			
54	LOAD PERCENTAGE [OPTIONAL]	AVAILABLE			
55	CHARGING ON GRID / SOLAR / OFF	AVAILABLE			
56	GRID CHARGER MUTE ON / OFF	AVAILABLE			
57	SYSTEM TEMPERATURE	AVAILABLE			
58	TEMPERATURE OK / FAULT	AVAILABLE			
59	NIGHT MODE DISCHARGE VOLTAGE	AVAILABLE [DISPLAY ONLY IN SBG MODE]			
60	KWHR GENERATION [ENERGY IN UNITS]	AVAILABLE			
61	Cooling	Forced Air Cooling			
62	Software Compatibility **[OPTIONAL]**	Panel Voltage, Panel Current, Panel Watts, Total Energy Generated, Today's Generation & Yesterdays Generation Parameters communicated to PC through RS 232 Inter face.			
63	Audible Noise	< 55dBA			
64	Ambient Temperature	upto 45°C			

NOTE: *** SOLAR PANEL TEMPERATURE CORRECTION FACTOR DEPENDENT.**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE - AS A CONTINUAL DEVELOPMENT OF PRODUCT.