

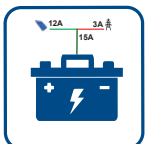
MADE IN INDIA

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energy

SUN PRO SOLAR HYBRID UPS

950/12V - 5000/48V

Controlled Battery Charging



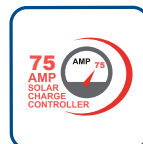
Intelligent Charging
Sharing



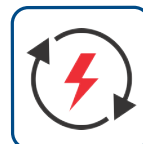
USER SETTABLE
GRID/SOLAR PRIORITY



BUILT-IN ISOLATION
TRANSFORMER



75AMP SOLAR
CHARGING CONTROLLER



INSTANT
CHANGEOVER TIME



24X7 MCB
PROTECTION



24X7 PROTECTION
DC MCB DOUBLE POLE



MANUAL
BYPASS SWITCH

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TECHNICAL SPECIFICATION

Model	SUNPRO 950	SUNPRO 1200	SUNPRO 2500	SUNPRO 2800	SUNPRO 3500	SUNPRO 4000	SUNPRO 5000
DC BUS	12V	12V	24V	24V	24V	48V	48V
BULB LOAD in WATT +/- 5%	650W	820W	1800W	2200W	2600W	3200W	4000W
DC CURRENT	56A	64A	56A	72A	92A	68A	86A
SCC TYPE	PWM						
MAX PV CONNECTED IN WATT	600W	800W	1800W	2.2KW	2.5KW	3.2KW	4KW
MAX PV CURRENT in AMP	30 A	30 A	55 A	75 A	75A	75A	75A
Mainins Input mode							
Mains AC low cut UPS mode	175VAC ± 10VAC						
Mains AC low cut recovery UPS mode	185VAC ± 10VAC						
Mains AC high cut UPS mode	265VAC ± 10VAC						
Mains AC high cut recovery UPS mode	255VAC ± 10VAC						
Mains AC low cut WUPS mode	90VAC ± 10VAC						
Mains AC low cut recovery WUPS mode	110VAC ± 10VAC						
Mains AC high cut WUPS mode	295VAC ± 10VAC						
Mains AC high cut recovery WUPS mode	285VAC ± 10VAC						
Input Frequency Range	40Hz to 60Hz						
Voltage Output in Mains Mode	Same as input						
Frequency Output in Mains Mode	Same as input						
Battery							
Battery Type	LA / Tubular / SMF						
DC input voltage	12V	24V				48V	
Battery Quantity 12V 100Ah to 220Ah	1	2				4	
Float charging voltage	13.7V±0.2V	27.4 +/- 0.4V				54.8 +/- 0.8V	
Boost charging voltage for Tubular and SMF Battery	14.5V±0.2V	28.0V +/- 0.4V				56.0V +/- 0.8V	
Boost charging voltage for LA Battery	14.0V±0.2V	29.0V +/- 0.4V				58.0V +/- 0.8V	
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)						
Battery High Cut	15.0±0.2V	31.0 +/- 0.4V				62.0 +/- 0.8V	
Charging Current 100Ah-135Ah	12A ± 1A						
Charging Current 150Ah-220Ah	15A ± 1A						
Backup Mode							
Output voltage	220VAC +5% -10% (untill battery low alarm)						
Output frequency	50Hz ± 0.2 Hz						
Output waveform	Pure Sine Wave ≤ 5% THD						
No Load current	≤ 4% of rated capacity						
Low Battery Warning	10.7V±0.2V	22V +/- 0.4V				44V +/- 0.8V	
Low Battery Cut	10.5V±0.2V	21.6 +/- 0.4V				43.2V +/- 0.8V	
Change over time UPS mode	< 10msec						
Change over time WUPS mode	< 25msec						
Crest Factor	1 : 5						
Peak Efficiency	86%						
Protections							
Overload in backup mode	≤ 100% Load Continuously run						
Short Circuit in Backup Mode	System will shutdown after 3 - retries in case of output short circuit						
Short Circuit in Mains Mode	Mains Fuse Blown						
Backfeed	System will shutdown in case of backfeed and there is no retry						
Over temperature	Yes provided, if heatsink temperature goes above 100°C System will shut down						
Reverse Battery	DC fuse will below						
Phase to Phase protection in mains mode	Yes provided by electronic						
Solar Charge Controller							
Solar Charge Controller type	PWM type						
Efficiency	> 96%						
Mains Charging Shairing	If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV and grid.						
Load Shairing	Load Shairing is provided, solar will deliver the power as per load and battery requirement. Solar Current = Load Current + Batter Charging Current If load is 0% then it will protect the battery for over charging and increase the battery life deliver <18A current for battery charging.						
Option for Solar Mode & Normal Mode	Yes, provided, user can select Solar Mode or Normal Mode. Hense user can select to Save Maximum Power or Smart Power saving mode. Solar Mode: System will run the 100% load on solar whole days (9:AM to 4:PM) and charge the battery from solar. Normal Mode: System will run the 100% load on solar during peak hours (10:AM to 3:PM) and charge the battery from solar.						
100% Solar Priority & Solar Utilization	System is utilizing 100% solar power available						
Revrse PV protection	Yes provided						
Revrse current flow to PV	Yes provided						
Display and Alarms							
LCD Initial Display	Welcome, Contect Website Address, System Capacity, Charging Till 80VAC and Deep Discharge Battery, System Setting, UPS / WUPS mode, I/P range 90-295VAC / 170-265VAC, Battert Type Selected LA / SMF / Tubular, Battery Capacity Selected 100-135Ah / 150-200Ah,						
LCD Status Display	Mains ON, Input Voltage, Input Frequency, Battery Voltage, Battery Charging, Battery Charged, Charging Current, Backup Mode, UPS ON, UPS OFF, Battery Voltage, Load %, Output Voltage, Output Frequency, Mains Low Cut, Mains High Cut, Mains Not Available, Mains Frequency Cut						
LCD Fault / Protection Status Display	Mains Fuse Below / MCB Trip, Short Circuit, Overload, Battery Low, High Tempature, Backfeed						
Buzzer	Audible beep for Overload, Short Circuit, Backfeed, Low Battery, Over Temperature, Mains Fuse below / MCB Trip						
Safety							
HV Test Input to Earth	Leakage current <5mA when 1.5KV applied for 1 min						
HV Test Output to Earth	Leakage current <5mA when 1.5KV applied for 1 min						
IR Test Input to Earth	>5MΩ between @ 500VDC						
IR Test Output to Earth	>5MΩ between @ 500VDC						
Earth Leakage current in Mains mode	< 2.5mA						
Earth Leakage current in Backup mode	< 2.5mA						
Environment							
Operating Temperature	0°C to 40°C						
Storage Temperature	0°C to 50°C						
Operating Relative Humidity	90% Non-Condensing						

Manufactured By: INVERTEK ENERGY SOLUTION PVT. LTD.

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