

# ADVANCED SOLAR HYBRID INDUSTRIAL / STATIC INVERTER / PCU



## INDUSTRIAL SOLUTION BY SOLAR

### CONVENIENCE

Solar Hybrid DSP uses both Solar Power as well as A.C. Mains for charging the battery bank according to priority setting providing the users availability of uninterrupted power supply.

### SALIENT FEATURES

- » User friendly Wide LCD display for battery user interface.
- » Smart Load sharing compatibility.
- » Monitoring/data logging feature for better system information at user end (optional)
- » Selectable charging current with high charging (HI) and Normal Charging (Low).
- » PV availability, battery charging from solar power indication with solar power priority
- » User friendly, control and selection switches with LCD indication on front panel
- » Protections such as Mains MCB Trip, Overload, Short circuit, Battery low, over temperature indication with buzzer as well as display on LCD available
- » Power Saving through No Load Shutdown Feature
- » Maximum Solar Power Utilization during charging and backup mode
- » PV pole reversal protection indication on LCD
- » Deep discharge battery charging from A.C. Mains as well as Solar
- » No humming Noise (Silent UPS)
- » AC Mains available, battery charging/charged and it voltage indication provided on LCD display

# ADVANCED SOLAR HYBRID INDUSTRIAL / STATIC INVERTER / PCU



## TECHNICAL SPECIFICATIONS HYBRID USP/SPCU

System Capacity	2.5KVA		3.5KVA	5KVA	7.5KVA	10KVA
Max PV Panel Power	2500W	2500W	3500W	5000W	7500W	10000W
Battery Voltage	36V	48V	48V	48V/96V	96V/120V	120V/192V
No Load Current	≤2.2A					
Output Voltage @ No Load	220V±5V					
Output Voltage @ Full Load	195V-220V					
DC Current @ Full Load	<63A±2A	<46A±2A	<63A±2A	<102 & 46A±2A	<76 & 53A±2A	<66A & 55A±2A
Output Frequency	50HZ±1HZ					
Solar Charger Type	PWM					

### UPS MODE

Low Cut Voltage	180V±10A
Low Cut Recovery	9V-12V HYSTERESIS
High Cut	260V±10V
High Cut Recovery	9V-12V HYSTERESIS
Charge Over Mains to UPS	<=10ms
Charge Over UPS TO Mains	<=10ms

### NORMAL MODE

Low Cut Voltage	100V±10A
Low Cut Recovery	9V-12V HYSTERESIS
High Cut	280V±10V
High Cut Recovery	9V-12V HYSTERESIS
Charge Over Mains to UPS	<=50ms
Charge Over UPS TO Mains	<=10ms

### CHARGING MODE (HC/QC)

Max Charging @ Mains Only	20A±2A
Max Charging @ Solar Only	30A±1A
Max Charging @ Solar + Mains	25A±1A

Solar + Mains Charging Current Adding in HC Mode, Max charging current below 13.7V Battery voltage; above 13.7 Battery Voltage charging current i

### CHARGING MODE (NC/EC)

Max Charging @ Mains Only	20A ± 2A
Max Charging @ Solar Only	30A ± 1A
Max Charging @ Solar + Mains	25A ± 1A

Mains Charging Current will be zero if solar current is >13A, Max charging current below 13.7V Battery Voltage; above 13.7V Battery Voltage, charging current is 15A±1A, system will cut off the mains when battery voltage reaches Boost voltage level and Output load is transferred to Solar + Battery Power.

### BATTERY CHARGING VOLTAGE

Boost Voltage	14.4V ± 0.2V / Battery
Float Voltage	13.7V ± 0.2V / Battery

### PROTECTION

Over Load Protection, Battery Low Protection, Over Temperature Protection, Short Circuit Protection (Battery Mode),PV Reverse Protection	Yes
Over Load Warning	Yes
Battery Low Alarm	Yes
Over Temperature Alarm	Yes
Short Ckts (Mains Mode)	Mains MCB Trip
Short Circuit Retry (Battery Mode)	Yes
Mains MCB Trip/Fuse Trip	Yes

\* All Protections are resetable through PCU Switch & Mains.

\* Above mentioned specifications are subjected to change as per development without prior notice.

### WEIGHT AND DIMENSTIONS

With Packaging LxWxH in mm	470x440x610	470x440x610	470x440x610	500x495x660	600x500x740	600x500x740
With Out Packaging LxWxH in mm	310x290x450	310x290x450	310x290x450	350x300x540	550x350x660	550x350x660
Net Weight	32	32	32	54	78	89
Gross Weight	39	39	39	58	89	100