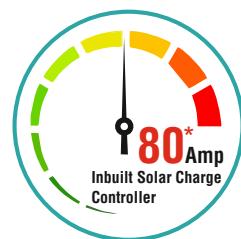


Solar Hybrid PCU-MPPT

Interleaved MPPT Technology
Most Efficient and Sustainable

*T&C apply.



Intelligent sharing of
Solar and Grid
charging current



Solar Battery
charger current
setting



Built-in heavy duty
solar charge controller



High Efficiency
Saves Energy



99% MPPT
Tracking Accuracy



30% more efficient than
conventional PWM PCU

Range 2500-3000/24V | 4000-6000/48V

Let's improve the quality of life!

From a modest start in early 2000 we invested a lot of time, effort and money solving the customer's problem in the areas of electricity. Today we can't imagine life without electricity. We always strive to offer a solution to our customers which can bring brightness and smiles in their life. After successfully developing market, customer awareness and establishing a few brands in more than 30 countries and having focus on green energy, we have been engaged in the areas of energy storage, renewable energy, storage products and electrical solution.

The backbone of the company are -

- Having 3 state of the art manufacturing facility in North of India.
- Total installed capacities of all the batteries and inverter are more than 1 Million a year.
- One of the largest OEM supplier & technology partner to conglomerate to big energy & solar brands globally.
- We are ISO, CE, UL certified and our products are approved for Saber Saleem (SASO), SONCAP by SGS and Intertek, CBCA by BIVAC, NEPQA.
- Products complied for JIS 8702-1:2009, IEC 60086, IEC 60896-22:2004.



Solar PCU - MPPT

- **Durasol Solar Hybrid PCU (MPPT Based)** is one of the most reliable, trusted and technically advanced Solar PCU in the industry.
- **Built to deliver high performance** in typically tough power grid conditions, it provides an economical power solution through optimal use of renewable solar energy.
- **Advanced DSP control technology** and high efficiency MPPT ensure high quality, true sinewave power output which is capable of running the most sophisticated and power sensitive equipment & appliances. The device boasts of dual line large LCD display with easy to read notifications and system parameters.
- **Smart management of renewable Solar Power**, Grid Supply and Battery allows it to deliver power seamlessly for all electric applications, thus significantly reducing energy costs as well as carbon footprint, due to its high efficiency, low maintenance and cost-effective package. Durasol MPPT based solar PCU has emerged as a preferred choice, especially, in developing countries.

Solar Priority

- Solar Battery Grid - with default & settable Depth of discharge of battery
- Solar Grid Battery - with fixed and default Depth of discharge of battery
- Solar only Mode - The unit will never go to mains bypass and charging, PCU will remain in solar/battery only.
- Normal Mode - In normal mode the PCU works as a normal inverter with solar charging. The unit will go to battery only if mains is not in specified range.

Robust Inverter design

- Heavy duty solar charger.
- MPPT equipped with interleaved Buck converter.
- Completely safe - DC MCB for battery & PV, AC MCB for AC input.
- Input, Output galvanic isolation through transformer.
- Robust design to handle grid supply & solar power variation.
- Manual bypass switch for uninterrupted maintenance.

Display & Monitoring

- User friendly LCD Display.
- Data logging capability more than five years.
- RS 232/GSM/GPRS/Wifi interface for remote monitoring & control (Optional).

Ease of Commissioning

- Reliable universal input & output terminal.
- It is easy to install which makes it a perfect solution for solar integration.
- It is designed for easy installation & commissioning and maintenance.



Technical Specifications - Solar Hybrid PCU - MPPT

DURASOL®
Energi

MPPT SOLAR PCU		DSHM2500	DSHM3000	DSHM4000	DSHM6000		
		2250VA/24V	2750VA/24V	3.5kVA/48V	5kVA/48V		
INPUT	Mains Voltage Range	90 ~ 300 ± 10 VAC, User settable					
OUTPUT	Voltage (Mains mode)	Same as Input					
	Frequency (Mains mode)	Same as Input (41-60 Hz)					
	Waveform (Mains mode)	Same as Input					
	Rated Voltage (Backup mode)	230 VAC ± 10%					
	Rated Frequency (Backup mode)	50Hz ± 0.5 Hz					
	Waveform (Backup mode)	Pure Sine Wave					
SOLAR	Efficiency	80%	80%	85%	86%		
	Min-Max Input Solar PV (Voc)	70-110 DC		80 - 170 DC			
	Max PV Watt (Wp)	2250 Wp	2750 Wp	3500 Wp	5000 Wp		
	Max PV Charging Current (A)	70 A	75 A	60 A	80 A		
	Max PV Input Current (A)	31A ± 2A	36A ± 2A	38A ± 2A	43A ± 2A		
BATTERY	MPPT Tracking Accuracy	Typical 99%					
	Capacity	180Ah-500Ah					
	DC Voltage	24V		48V			
PROTECTIONS	Parameters	PV reverse polarity, Low battery, Reverse battery, PV high, Battery high voltage, Overload, Output short circuit, Over temperature, MCB Input mains, MCB PV Input, MCB battery.					
SETTABLE OPTIONS	Battery Charging Current (Mains mode) (A)	20/15(Default)/10/5/0 AMPS					
	Mains Low Cut / High Cut range	Low cut(90~180 ± 10VAC), 90VAC(Default), High Cut(250~300 ± 10VAC), 290VAC(Default) For UPS mode (IT equipments) set 180 ~ 260/270 VAC					
	Max Solar Battery Charger Current Settable	5A to 60A/30A(Default)**					
	Priority Selection	Per 12V Battery: SBG(DOD, 10.5VDC to 12.8VDC), DOD 11.5VDC(Default)/SGB(Default), fix DOD 12V/Solar only/Normal Mode					
	Battery Type Selection	Tubular(Default)/SMF/Local/Flat-LA***					
	Boost & Float Voltage in Mains/Solar Mode	Per 12V Battery: Boost range (13.9Vd.c. to 14.9Vd.c. ± 0.8V), 14.4Vd.c.(Default) Per 12V Battery: Float range (13.3Vd.c. to 13.9Vd.c. ± 0.8V), 13.7Vd.c.(Default)					
	Battery Low setting	11/10.5(Default)/10/9.6V					
LCD Display	Parameters(Normal scrolling)	Grid Voltage, Battery Voltage, Output Voltage, Charging Current, PV Voltage, PV Current, Load %, PV Power, Energy Saved					
ENVIRONMENTAL	Operating Temperature	0-45°C (32-113°F)					
	Storage Temperature	0-45°C (32-113°F)					
	Humidity	0-95% RH non condensing					
PHYSICAL	Net weight (Kg)	20.0	21.8	32.5	37.9		
	Gross weight (Kg)	21.5	23.2	34.7	39.5		
	Dimensions (LxWxH) mm	295 x 315 x 280		295 x 375 x 445			

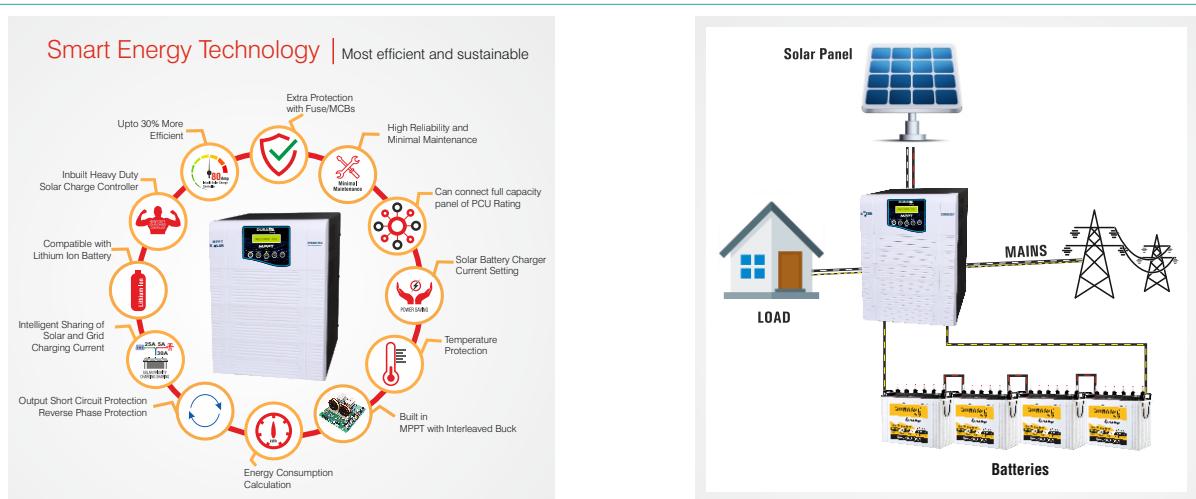
*Specification are subject to change without prior notice. For detailed technical specifications, please refer to the product manual.

*Under standard operating condition of battery fully charged and availability of solar power.

**Use appropriate battery grid charging current as per battery manufacturer recommendation while using solar recommended Battery AH is 180Ah to 500Ah.

***Li-ion Battery can be added as per customer battery specifications.

Installation Diagram



OUR COMPLETE RANGE OF ENERGY SOLUTIONS

(Products other than Inverter, Solar PCU and batteries are under ETG brand)



Our Presence

Presence in more than 30 countries and still counting.

Overseas offices in Middle East and manufacturing facilities at Sudan.

