

# Technical Specifications - Solar Hybrid PCU - MPPT

MPPT SOLAR PCU		DSHM2750	DSHM3000	DSHM4000	DSHM6000
		2250VA/24V	2750VA/24V	3.5kVA/48V	5kVA/48V
INPUT	Mains Voltage Range	90 ~ 300 ± 10 VAC, User settable			
	Voltage (Mains mode)	Same as Input			
OUTPUT	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			
	Efficiency	80%	80%	85%	86%
SOLAR	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
	MPPT Tracking Accuracy	Typical 99%			
BATTERY	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

