



ENERGY TO PERFORM

Advanced appt algorithm ensures highest generation

SOLAR PCU





MPPT ALGORITHM 90% + EFFICIENCY.



LOW DISTORTION OUTPUT BEST FOR CRITICAL LOADS



SYNCHRONIZATION WITH GENSETS.



# **TECH. DATA SHEET OF SOLAR PCU**

Parameters	Specifications					
Models	1150   1175   1375-12V	2450/24V	3800/48V			
BATTERY MODE						
No Load Current @ Switch Off	≤ 180mA	≤ 200mA	≤ 180mA			
battery Voltage @ No Load	12V	24V	48V			
Output Frequency	50Hz	50Hz	50 Hz			
Output Voltage @ No Load	225± 7 V	225± 7 V	225± 7 V			
Battery Current @ Full Load	61   53   65	6 ± 1 A	70 ± 1 A			
UPS MODE						
Low Cut	180±5V	180±5V	180±5V			
High Cut	270±5V	270±5V	270±5V			
Change Over Time	≤ 8 Msec	≤ 8 Msec	≤ 8 Msec			
SOLAR CHARGE CONTROLLER WITH LIVE CLOCK						
Charge Controller Rating	50A	50A	50A			
Max. Pv (Voc)	25V	50V	[108 X Specified Vdc] V			
Solar Battery Charging Current(Settable)	30A(Default)	30A(Default)	30A(Default)			

### **MPPT RANGE**

Inverter Rating	5KVA	10KVA	15KVA	20KVA			
Nominal Battery Voltange	48V		240V	240V			
No of Phases	1P	1P/3P	1P/3P	1P/3P			
Nominal Output Voltage/ Frequency	230/400 V (+ 10% & -20% in Grid synchronised model/50 Hz $\pm$ 2%						
Voltage Regulation (in Standalone Mode)	± 2%						
Freq. Regulation (in Standalone Mode)	± 0.5 Hz						
THD	< than 5%						
Load Power Factor	Unity						
Efficiency (Peak)	88%		90%				
Over Loads: 60 sec/ 30 sec/ 5 sec	110%   125%   150%						
Max Allowed Phase Imbalance (for 3Ph)	NA 30%						
Auto Bypass Feature	Provided						
Parallel Operation with Grid/ DG	Provided						
Grid Synchronisation & Anto-Islanding	Provided						
Grid Charging	Enable / Disable (User Settable)						
Power Export to Grid Facility	Enable / Disable (User Settable)						
SOLAR CHARGE CONTROLLER							
Charge Controller Type	MPPT						
Charger Topology	Buck Type						
PV Nominal Capacity (Total in KW)	Same as Inverter Capacity						
No of MPPT Channels	1		_				
Max. Open Circuit PV Volts (Voc)	190V	360V	360V/720V	360V/720V			
MPPT Upper Range	156V	312V	312V/624V	312V/624V			
MPPT Lower Range	66V	165V	165V/330V	165V/330V			
Battery type Supported	VRLA   LMLA   Ni - Cd   Li - Ion Chemistries   Flow Batteries						
Peak Charging Efficiency ≥94%							
GRID CHARGER							
Grid Voltange Range (Voltage Sync. Rance)	+10% & -20% VAC						
Grid Frequency range (Freq. Sync Range)	+5% & -5% Hz						
Max Grid Import Power	as per inverter rating						
Peak Chargin	up to 85 %						

#### **CORPORATE OFFICE**

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## **INTERNATIONAL BUSINESS OFFICE**

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