

# POWER YOUR HOME WITH FREE SOLAR ENERGY





Models: PCU 1235N/12V, PCU 1435N/12V & PCU 1450/12V PCU 2035N/24V, PCU 2335N/24V & PCU 2350/24V

## Gen-Next Sinewave Hybrid Solar PCU is based on DSP technology.

- Integrated with in-built 35Amp/50Amp PWM based Smart Solar Management Unit.
- Pure Sinewave Output, Noiseless Operation.
- Operates on both Solar Power as well as Grid Power.
- Intelligent Sharing of Grid Current with Solar in case of Solar Energy Shortfall.
- Designed to give maximum benefit from Solar Energy & minimize your Electricity Bill.
- Highly Efficient Battery Charging from Solar Energy as a result you will get non-stop Power, Save Electricity and Save Money.
- Provision of "NO CHARGING of BATTERY from GRID" by keeping the Grid Charging Slide Switch in Disable Mode resulting in Real Power Saving.
- Grid Charging Enable / Disable Slide Switch.
- Intelligent Selection Modes for Smart Solar PCU and Normal UPS.
- Battery Deep Discharge Pickup Capability.
- Solar Reverse Voltage Protection and Battery Over Voltage Protection.
- Long Battery Life as sunlight directly converts into pure DC(Direct Current).
- High/Low Grid Charging Selection Switch.

#### User-Friendly LCD DISPLAY, shows following parameters:

- > Grid Units Saved (KWH)
- > Solar Power Available (Watt)
- > PV Voltage
- > PV Current
- > Grid Voltage
- > Battery Voltage
- > Grid Charging Current
- > Output Load Percentage
- > Output Voltage





USE RENEWABLE ENERGY-SAVE THE EARTH





## **SOLAR PCU**

### TECHNICAL SPECIFICATIONS

MODEL SOLAR PCU	PCU 1235N/12V	PCU 1435N/12V	PCU 1450/12V	PCU 2035N/24V	PCU 2335N/24V	PCU 2350/24V
Input Voltage	Wide Input Voltage Range: 100V~280V					
	Narrow Input Voltage Range: 170V~260V					
Output Voltage on Mains Mode	Same as Input Voltage					
Output Voltage on UPS Mode	210V±10%	210V±10%	230V±10%	210V±10%	210V±10%	230V±10%
Output Frequency on UPS mode	50Hz ± 0.1Hz					
Switching	From Mains to UPS and from UPS to Mains: Automatic					
Output Waveform on Mains mode	Same as Input					
Output Waveform on UPS mode	Pure Sinewave					
Battery Charging Current: Mains	Constant Charging approx 10% of the Rated Battery Current in AH					
Maximum Solar Panel Current	30A	30A	50A	30A	30A	50A
Solar Over Current Capacity	20%					
Mains Mode Charger	Power Factor Controlled Boost Technology					
Peak Efficiency	>80%					
UPS Overload / UPS Short Circuit	110% / 300%					
UPS Transfer Time	≤ 15 msec.					
Technology	DSPIC Micro Controller Based Design					
Auto Reset Feature	Yes					
Reverse Panel Protection	Yes					
Charging Profile with Solar	Complete					
Solar Charger / Normal Charger Modes	Slide Switch to Select Charger Mode					
Battery Deep Discharge Pickup Capability	Yes					
Thermal Protection	Both in Grid Charging & Backup Mode					
Cooling Fan Control	Both by Load & Temperature and in Charging Mode too					
Output Voltage Fluctuation (Backup Mode)	Not at All					
Display Indications	LCD (16x2) for Display					
Grid Units Saved Till Date Info	KWH Indication Present					
Solar Power Available at the moment info	WATT Indication Present					
DC Input Volt. High Cut Protection/Recover	Yes					
Maximum Solar Power Rating	45W to 600W	45W to 600W	45W to 1000W	100W to 1200W	100W to 1200W	100W to 2000W
Operating Temperature	0~45°C					
Gross Weight	10.22Kgs.	11.44Kgs.	11.44Kgs.	17.50Kgs.	19.12Kgs.	19.12Kgs.
Dimensions (LxWxH) in mm	390x388x200	390x388x200	390x388x200	460x430x220	460x430x220	460x430x220

NOTE: Because of a policy of continuous product improvement, the specifications are subject to change without notice.

