



MAXIMUM SOLAR POWER MAKE MAXIMUM SAVINGS



Extra Broad
operating Voltage
window (90 to 290V)



LCD Display
(To control & monitor
real time data)



Pure sine
wave output

What is a Solar PCU?

A Power Conditioning Unit serves both as a solar charge controller and an inverter. It is a unique hybrid system which can charge batteries through solar and grid. As solar panels make DC electricity, it goes to the Solar PCU which converts DC into AC to power electrical load and stores the remaining DC electricity in batteries. When there is a deficit of solar power, Solar PCU intelligently runs the connected load on solar energy stored in batteries.

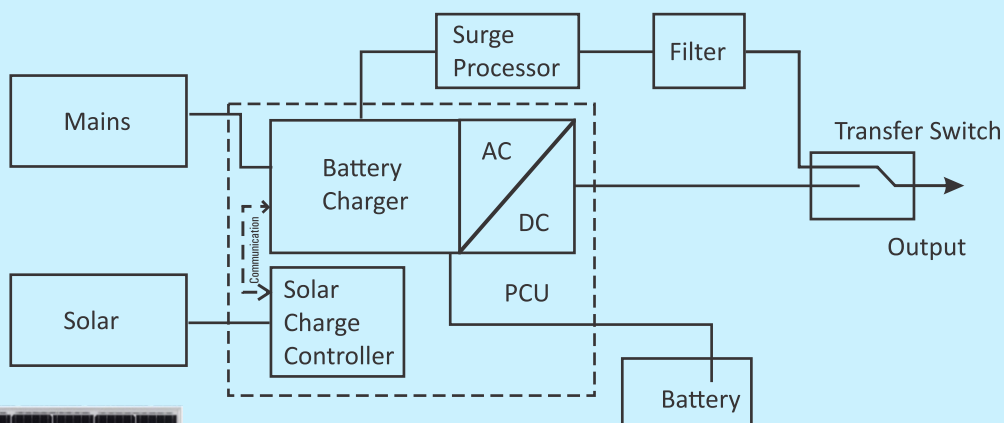
Need of solar PCU?

A solar off-grid system / PCU can charge batteries through both solar and grid. However, what makes it a better option than a normal UPS/ inverter is that it gives priority to solar while charging batteries and also while running

Advantages of Solar PCU

- In a normal inverter the battery is charged on grid and the load too is run on it. This leads to increased electricity bills. A solar off-grid system / PCU gives first priority to solar thus leading to decreased electricity bills.
- A solar off-grid system / PCU makes maximum utilization of solar since it gives first preference to load and then to battery charging.
- Gives backup in case of grid failure.

Line Diagram of PCU



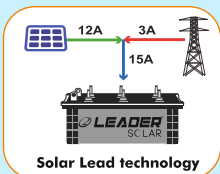
Leader Solar Presents Liger Solar Power Conditioning Unit (PCU), which gives flexibility of charging the battery through both grid and solar -according to your choice. It has the dual function of being a normal UPS as well as an off-Grid Solar power generation system. This brilliant system is able to run all kind sensitive load like PC, Router, modem & Printer etc. Liger is best in all parameters -best price, best Technology, best features & most important best performance.



SOLAR PCU has built-in 50A powerful solar charge controller, so it has strength to run electrical appliances and charge the battery at the same time.

Leader solar is designed for best charging technology. it has a powerful 18Amp grid charger.

Now you can charge your batteries in just half charging time by its super fast charging.



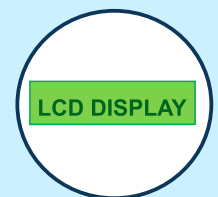
Solar Lead Technology gives main preference for battery charging is through solar to reduce the power used from the grid , thus saving maximum money on electricity bills.

Solar PCU had extra broad operating window. this advance feature helps to charge the batteries even when grid voltage is as low as 85-90V. Ordinary PCU go on battery backup mode when voltage falls below 110V.



Zero Switch over time from mains mode to battery mode makes system quite responsive. It is perfect to run all type of sensitive equipment like computer, printer, router & modems etc.

PCU has a LCD screen on the system through which consumer can easily monitor & control the system .It shows all important parameters like PV Vol. | Load% | battery vol. etc.



Advance 6 Stage Charging makes the Battery charging more efficient . It ensures the healthy battery life and also prolongs the life .

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 Volatge @ No Load	12V	24V	48V
Output Frequency	50 Hz	50 Hz	50 Hz
Output Voltage @ No Load	225± 7 V	225± 7 V	220± 10 V
Battery Current @ Full Load	61 53 65±1A	76± 1 A	70± 1 A
Short Circuit	>300%	>300%	>300%
Crest Factor	≤ 300%	≤ 300%	≤ 300%
Harmonic Distortion In O/P Wave-form(Liner Load)	≤ 3%	≤ 3%	≤ 3%
UPS MODE			
Low Cut	180±5V	180±5V	180±5V
Low Cut Recovery	9-12 V Hysterisis From > Low Cut Voltage	9-12 V Hysterisis From > Low Cut Voltage	9-12 V Hysterisis From > Low Cut Voltage
High Cut	270±5V	270±5V	270±5V
High Cut Recovery	9-12 V Hysterisis From <Low Cut Voltage	9-12 V Hysterisis From <Low Cut Voltage	9-12 V Hysterisis From <Low Cut Voltage
Change Over Time	≤ 8 Msec	≤ 8 Msec	≤ 8 Msec
NORMAL MODE			
Low Cut	90±5V	90±5V	90±5V
Low Cut Recovery	9-12 V Hysterisis From > Low Cut Voltage	9-12 V Hysterisis From > Low Cut Voltage	9-12 V Hysterisis From > Low Cut Voltage
Hight Cut	290±5V	290±5V	290±5V
High Cut Recovery	9-12 V Hysterisis From <Low Cut Voltage	9-12 V Hysterisis From <Low Cut Voltage	9-12 V Hysterisis From <Low Cut Voltage
Change Over Time	≤ 10Msec	≤ 10Msec	≤ 10Msec
CHARGING MODE			
Low Charging Current @ 220V(Nc)	13±1A	15±1A	15±1A
High Charging Current @220V(Hc)	17±1A	20±1A	20±1A
Boost Charging Voltage(Hc/Nc)	14.4±0.2V	28.8±0.4V	14.4±0.2V(Per Battery)
Float Charging Voltage(Hc/Nc)	13.7±0.2V	27.4±0.4V	13.7±0.2V(Per Battery)
SOLAR CHARGE CONTROLLER WITH LIVE CLOCK			
Charge Controller Rating	50A	50A	50A
Charge Controller Type	Pwm Based	Pwm Based	Pwm Based
Max. Pv (Voc)	25V	50V	[108 X Specified Vdc] V
Solar Battery Charging Current (Settable)	30A(Default)	30A(Default)	30A(Default)
PROTECTIONS			
Overload Battery Low Over Temperature Short Circuit Pv Reverse Mains Fuse & Mcb			

