

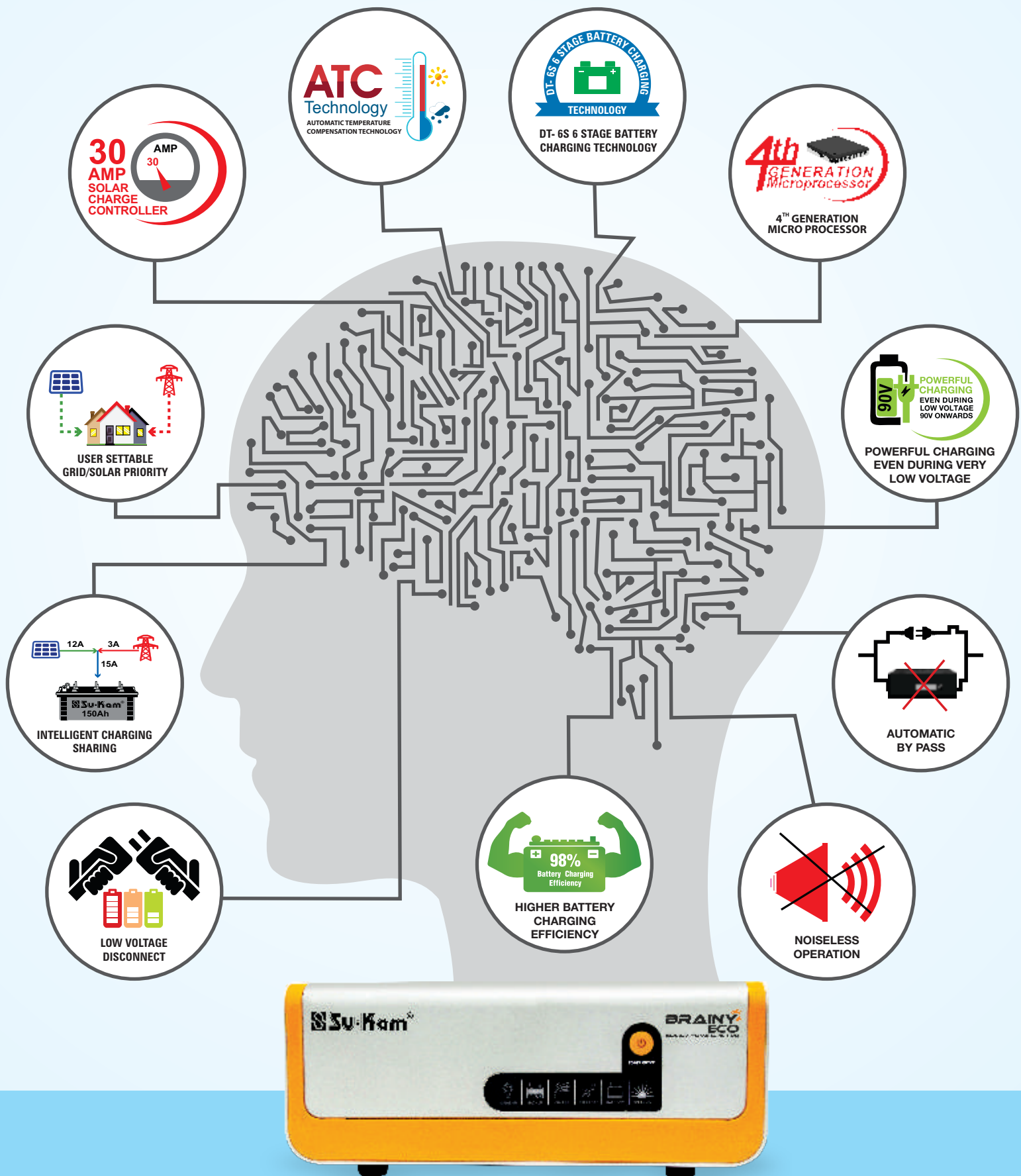
# INDIA'S-MOST-INTELLIGENT SOLAR HOME UPS



**BRAINY  
ECO**  
SOLAR HOME UPS 1100

## Solar Hybrid UPS

# INTELLIGENCE INTEGRATED



# HOW BRAINY ECO WORKS

## Solar Power (Priority)



## Mains Supply



Brainy Eco is an intelligent solar UPS that can simultaneously run the load and charge the battery. Brainy Eco is designed to give priority to the Solar Power and uses Grid/DG Power only when the Solar Power/Battery Charge is insufficient to meet the load requirements.



Brainy Eco 1100 / 12V



Load



Battery

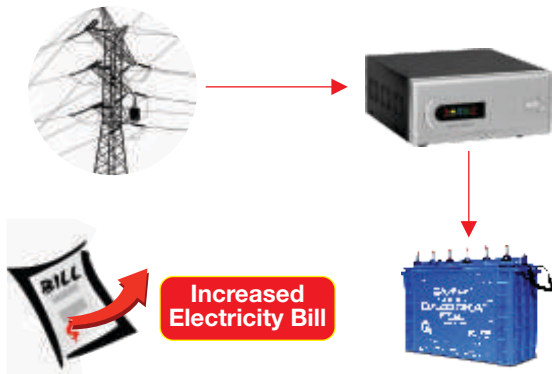
# BIG SAVINGS ON ELECTRICITY BILL



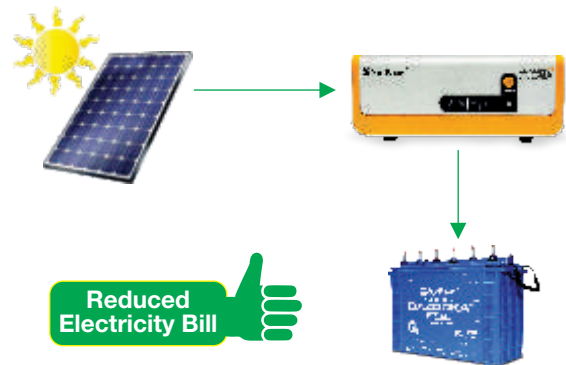
## DID YOU KNOW?

CHARGING YOUR BATTERY THROUGH GRID POWER INCREASES YOUR ELECTRICITY BILL

### BATTERY CHARGING THROUGH GRID



### BATTERY CHARGING THROUGH SOLAR

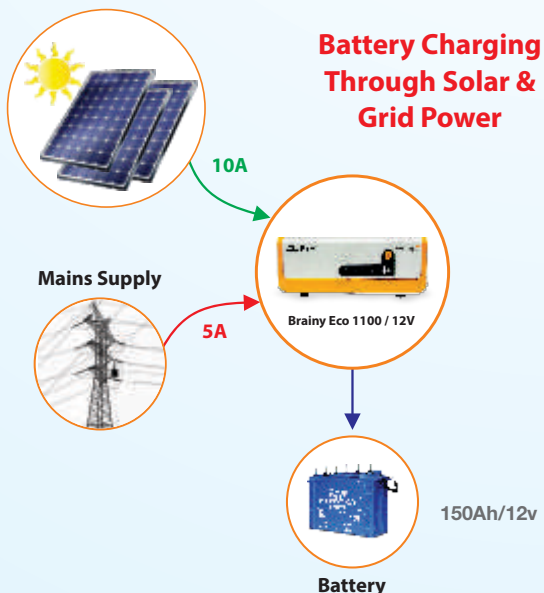


## USER SETTABLE GRID CHARGING ENABLE/DISABLE SWITCH

### GRID CHARGING ENABLED



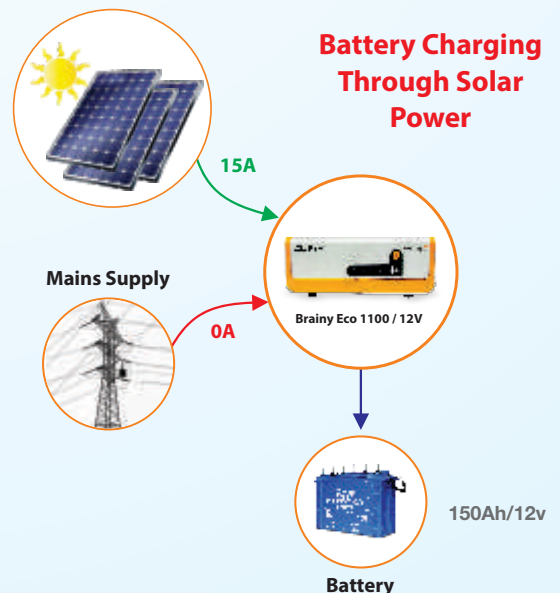
Solar Power Panel



### GRID CHARGING DISABLED

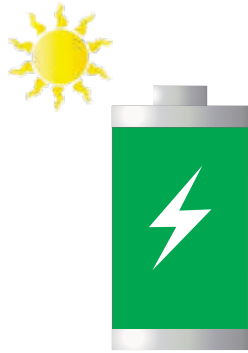


Solar Power Panel

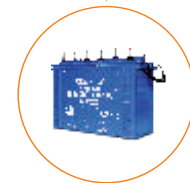


# LONGER BATTERY LIFE

When The Battery is Charged Through Solar Power it Leads to:



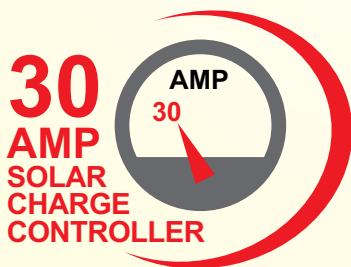
**98% Battery**  
Charging Efficiency



150Ah

At Least **6 Months**  
Increase in Battery Life

# POWER BUILT-IN 30 AMP SOLAR CHARGING



Powerful enough to  
simultaneously run  
Electrical Appliances  
and charge the battery.

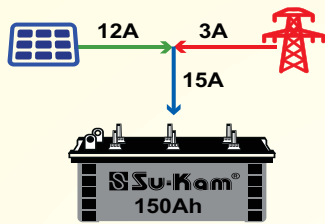
**RUN LOAD &  
CHARGE BATTERY  
AT THE SAME TIME**



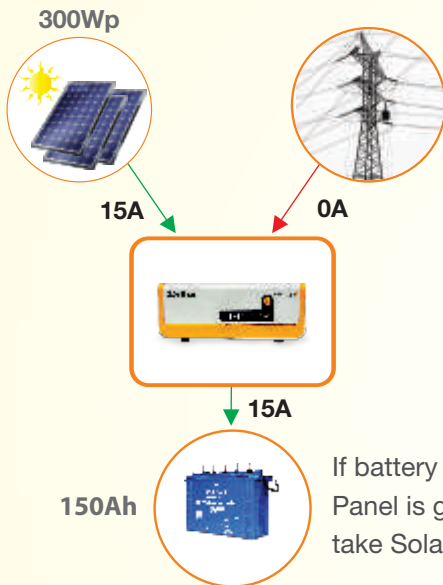
# INTELLIGENT CHARGING THROUGH SOLAR & GRID



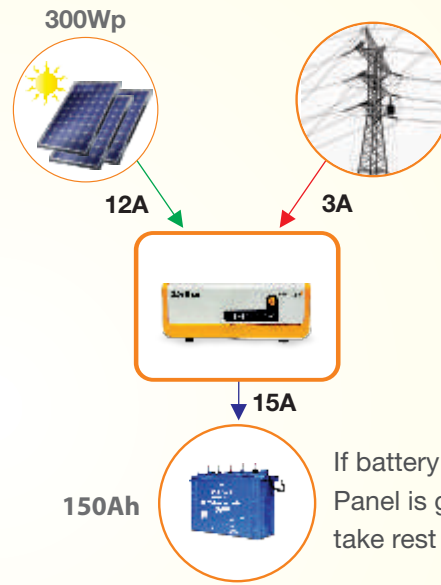
# INTELLIGENT CHARGING SHARING



It selects Solar power as a priority over grid power to charge the battery and take power from the grid only if required.

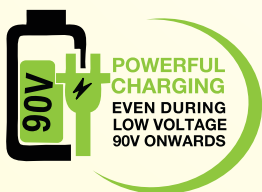


If battery needs 15A and Solar Panel is giving 15A, then it will take Solar Power only.



If battery needs 15A and Solar Panel is giving 12A, then it will take rest 3A from Grid.

## POWERFUL CHARGING ON LOW VOLTAGE

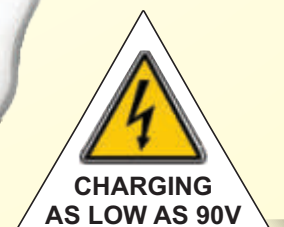


Charges even at 90V, thus ideal for areas which have low voltage problems.

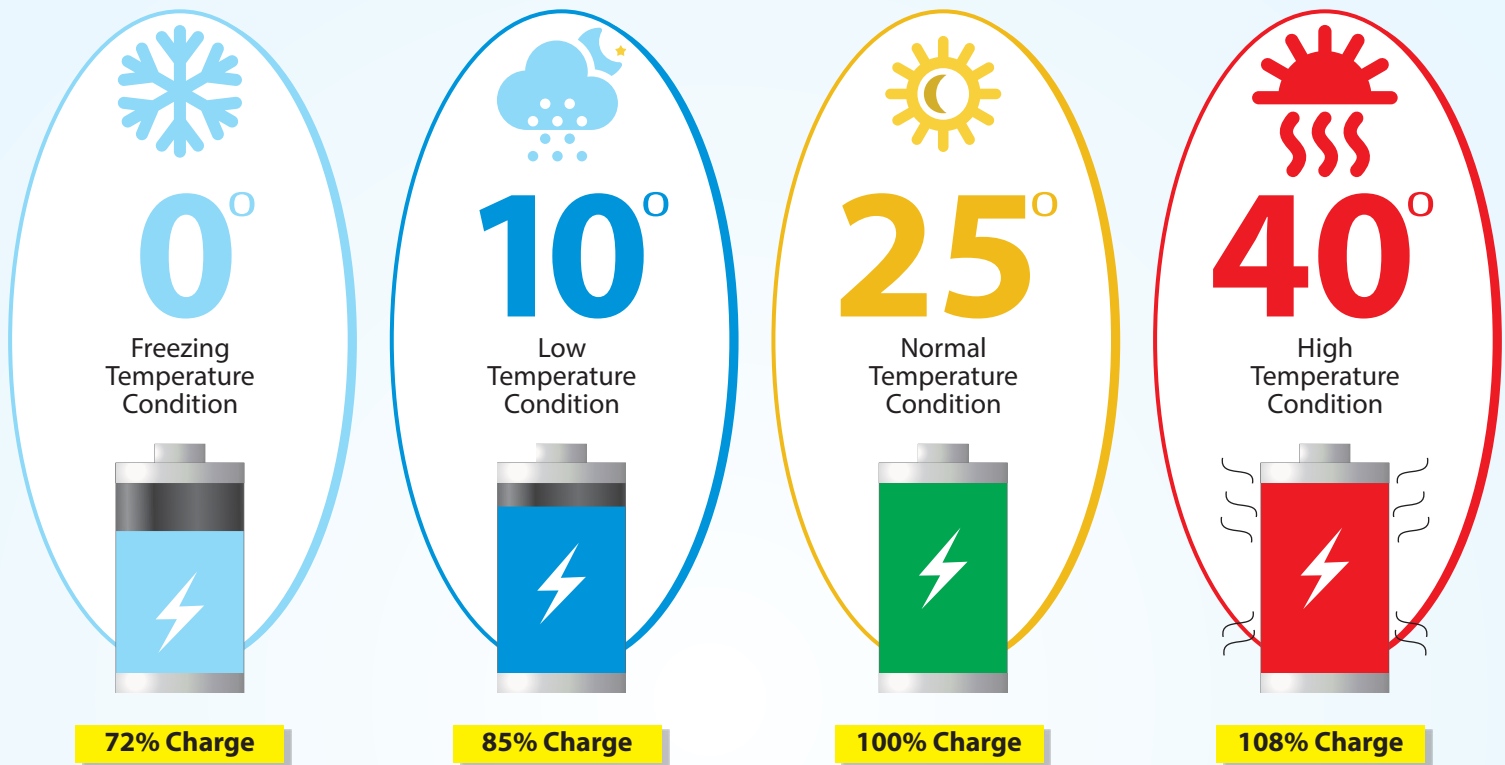
Typically, the UPS batteries require minimum 130 volt for Charging.

Brainy Eco Charges the battery with voltage as low as 90 volt.

Most effective solution for remote places where the electricity voltage is not high.

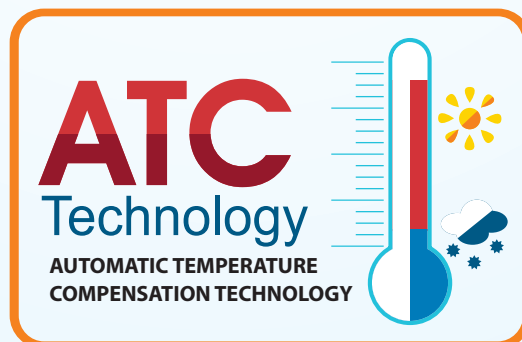


# AUTOMATIC TEMPERATURE COMPENSATION



ATC involves a hi-tech sensor, which senses the outside ambient temperature and accordingly adjusts the charging of batteries. The sensor automatically controls over-charging and under-charging, increases the battery life by at least 6 months and provides excellent battery back-up.

Su-Kam's First Home UPS with ATC Technology senses the outside temperature and accordingly adjusts charging of batteries.



ATC Sensor is kept close to the battery bank that determines battery temperature and automatically adjust the target boost voltage.

This new charging system monitors the battery temperature and automatically regulates the boost voltage.

**CONTROLS OVER/UNDER CHARGING**

**INCREASES BATTERY LIFE BY ATLEAST 6 MONTHS**

This automatic sensor controls over-charging and under-charging thereby provides excellent battery back-up and increases battery life by at least 6 months.



# BENEFITS OF ATC TECHNOLOGY

1

Controls  
over-charging and  
under-charging  
of battery

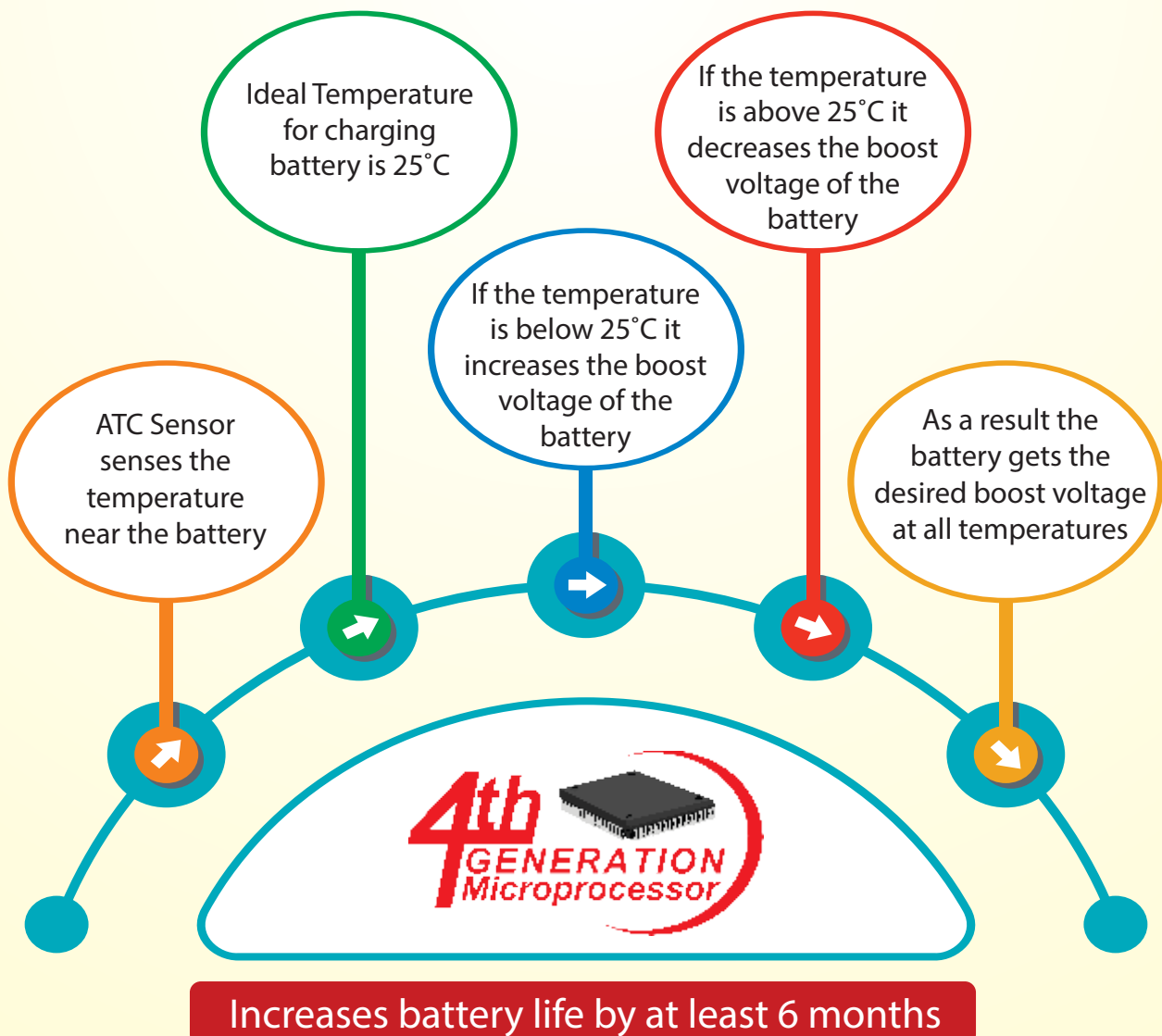
2

Low  
Energy Wastage

3

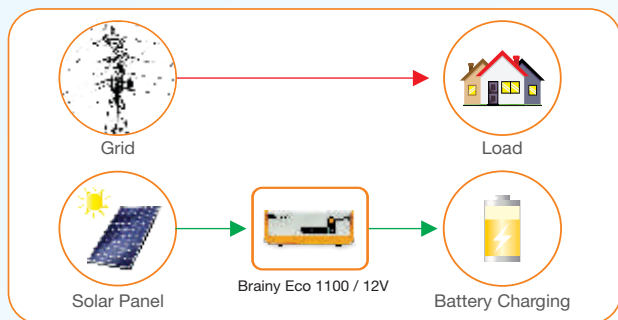
Increases  
battery life  
by at least  
6 months

## THE WORKING PROCESS

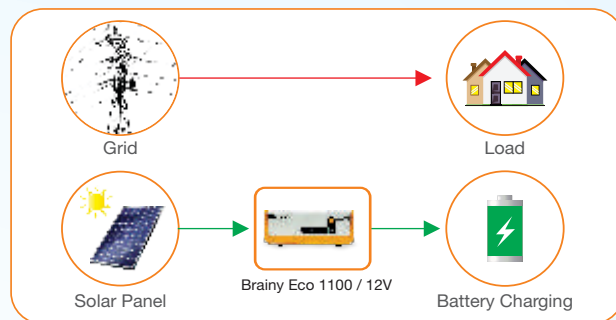


# USER SETTABLE SOLAR/GRID PRIORITY

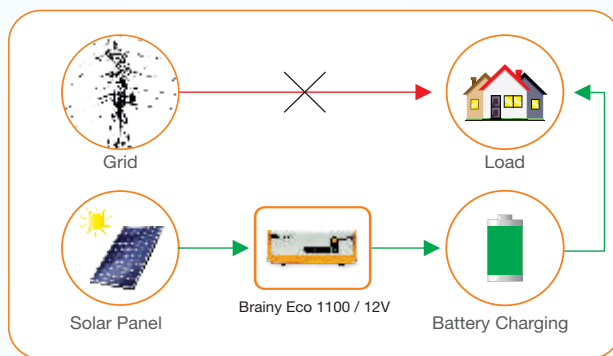
## GRID CHARGING DISABLED



**Step 1.**  
Load runs on Grid power and  
Battery charges through solar power



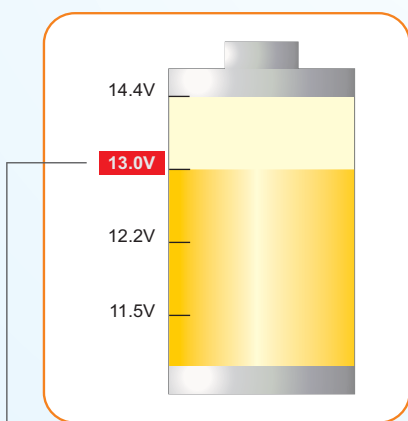
**Step 2.**  
Battery Charged Completely



**Step 3.**  
Grid Power disconnected and  
load runs on battery backup

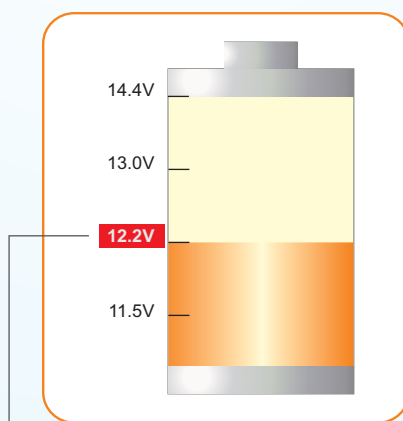
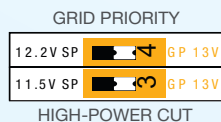


### USER SETTABLE MODES



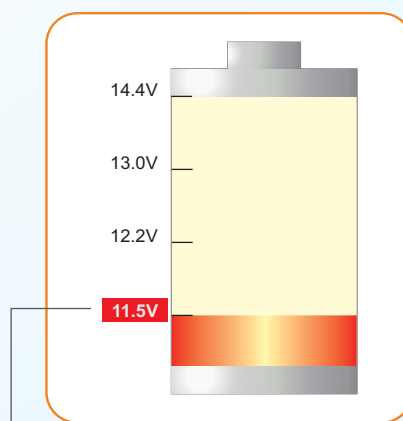
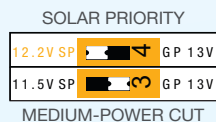
**MODE 1**

Use this switch mode if your locality  
experience power cuts frequently.



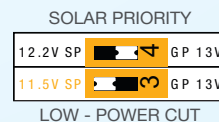
**MODE 2**

This switch mode can be utilized if your area  
has power cuts less frequent.



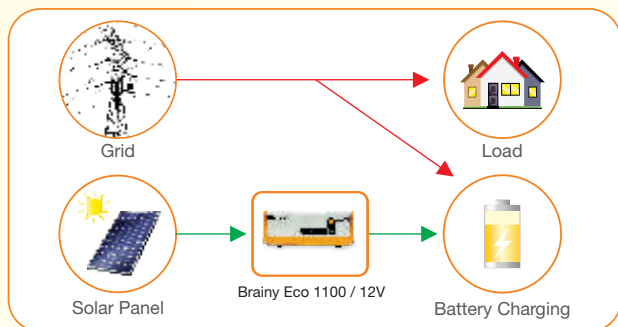
**MODE 3**

This switch mode is best for the areas where  
power cuts are minimal.

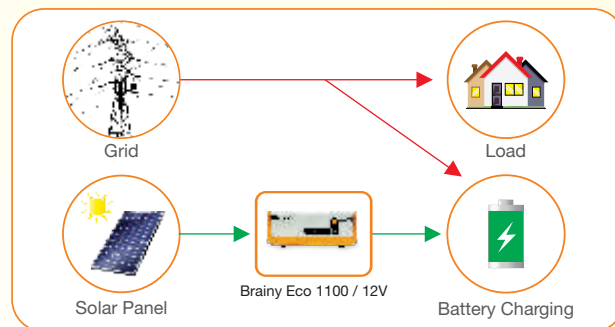


# USER SETTABLE SOLAR/GRID PRIORITY

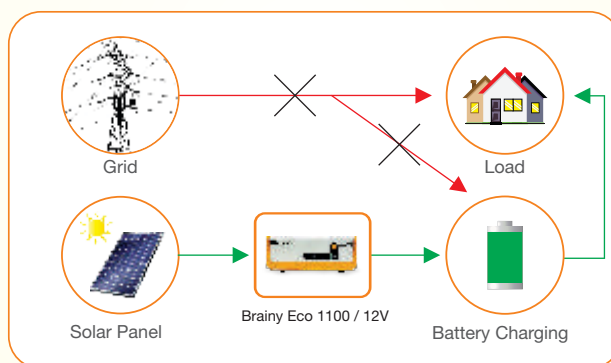
## GRID CHARGING ENABLED



**Step 1.**  
Load runs on grid power and  
Battery charges through both Solar and Grid Power



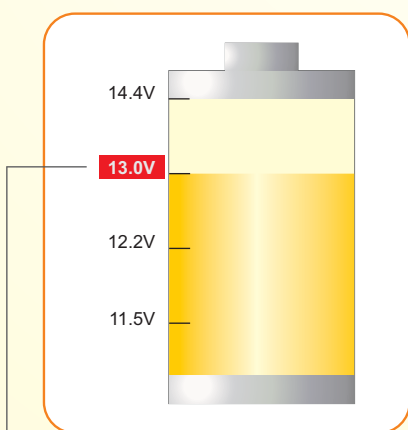
**Step 2.**  
Battery Charged Completely



**Step 3.**  
Grid Power disconnected and  
load runs on solar backup

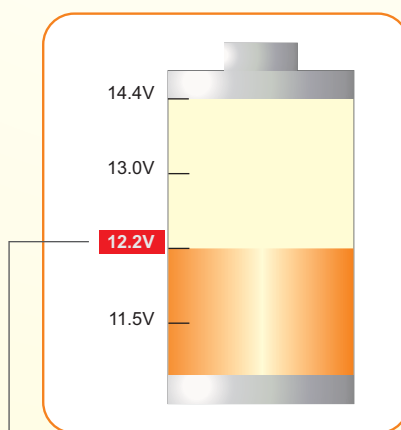
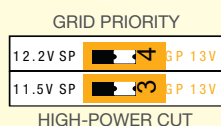


### USER SETTABLE MODES



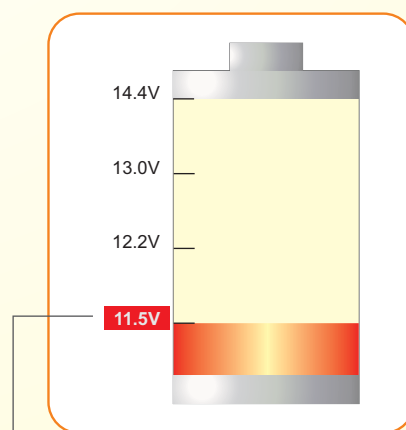
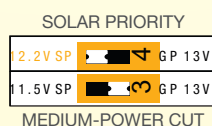
**MODE 1**

Use this switch mode if your locality  
experience power cuts frequently.



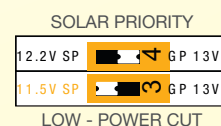
**MODE 2**

This switch mode can be utilized if your area  
has power cuts less frequent.



**MODE 3**

This switch mode is best for the areas where  
power cuts are minimal.



# INCREASE YOUR BATTERY LIFE WITH LVD



## Low Voltage Disconnect

Brainy Eco comes with a choice for low voltage selection and low voltage disconnect (LVD). Commonly all UPS has a backup cut at 10.5 whereas Brainy Eco gives a backup cut at 11 which makes it useful for the areas with less frequent power cuts.

### POWER OF 11

LOW VOLTAGE SELECTION

#### Backup cut at 11V

Less backup more  
battery life

#### Backup cut at 10.5V

More backup time  
Less battery life

#### Less than 10.5V

Deep Discharge

## ADVANTAGE OF LOW VOLTAGE DISCONNECT (LVD)

- ▶ Save battery from deep discharge
- ▶ Faster battery charging
- ▶ Life of battery increases by least 3 months



# PROTECTION TO YOUR HOME APPLIANCES



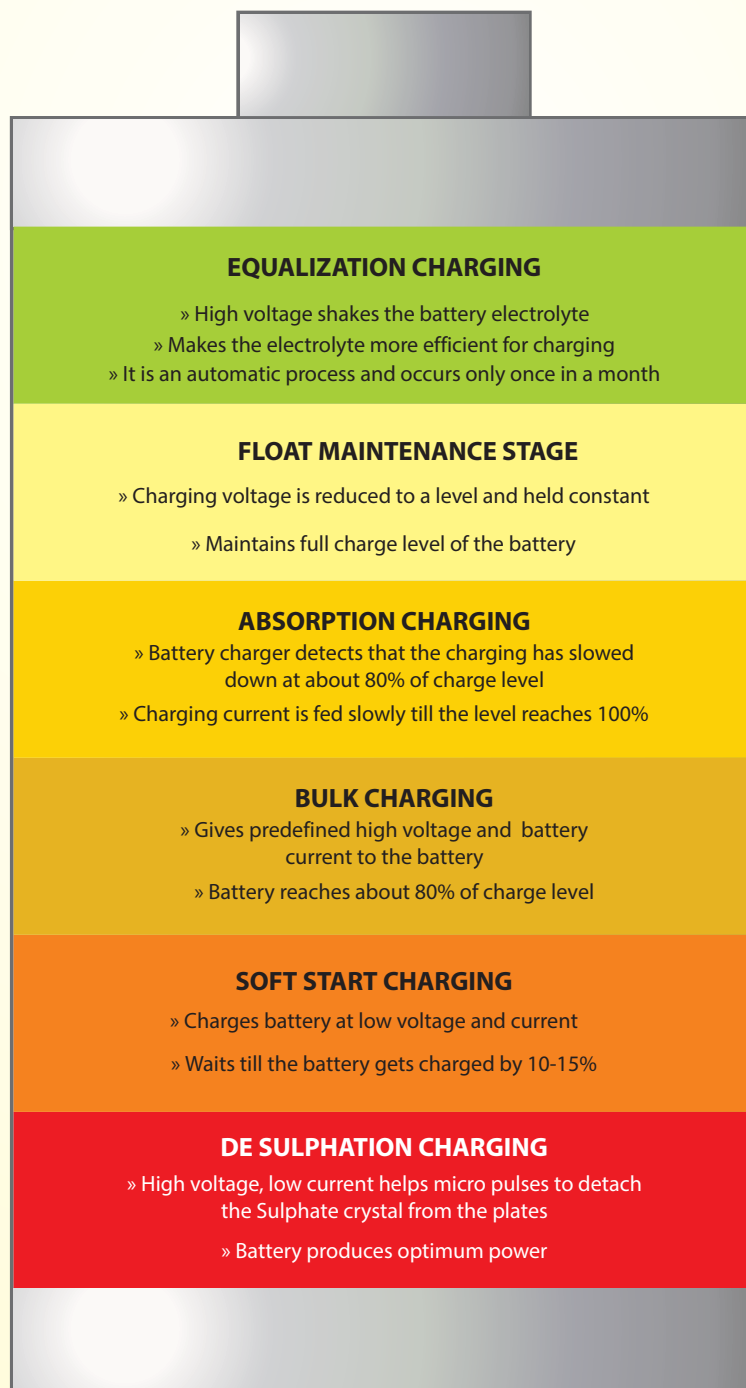
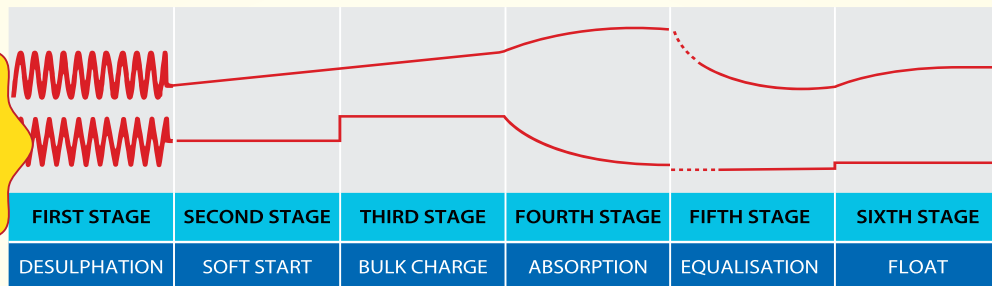
- ▶ Brainy Eco series is equipped with MCB (Miniature Circuit Breaker)/ Resettable Fuse
- ▶ Protects the system and appliances from overload and short circuit



# DT-6S : 6 STAGE BATTERY CHARGING TECHNOLOGY

## INTELLIGENT 6-STAGE BATTERY CHARGING

**DT-6S  
6 STAGE  
BATTERY CHARGING  
TECHNOLOGY**  
(Increases Battery  
Life Upto 30%)

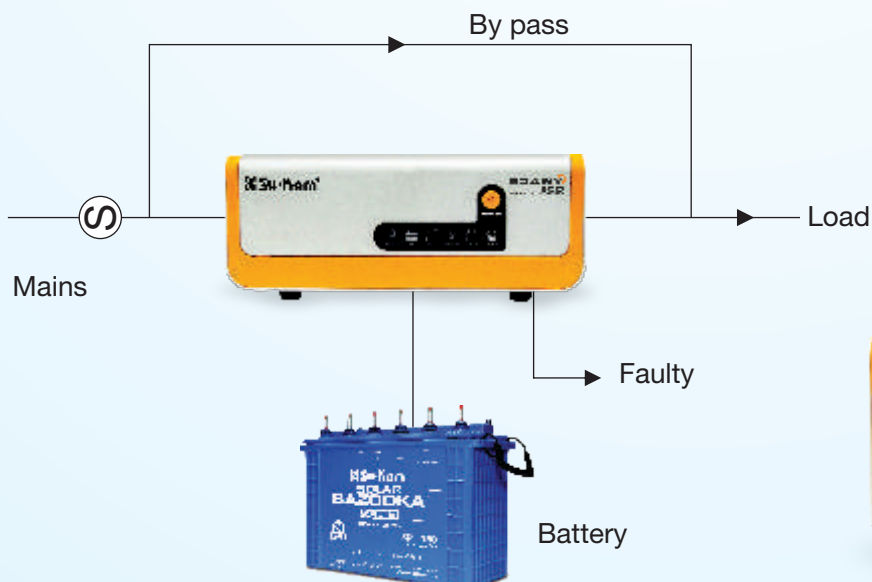


# POWERFULL ENOUGH TO RUN 7 COMPUTERS\*



\*14 Inch TFT Monitor with Model 1100

# ENJOY UNINTERRUPTED POWER SUPPLY EVEN WHEN UPS FAILS

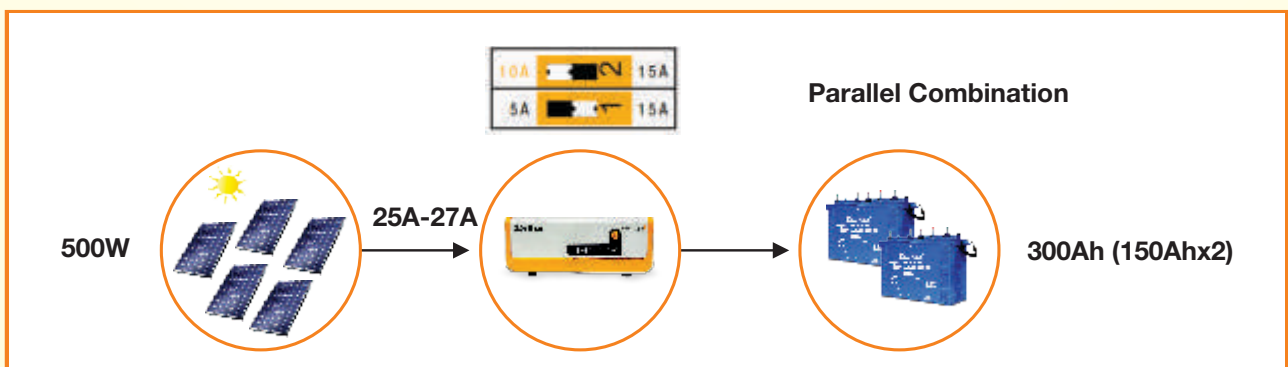
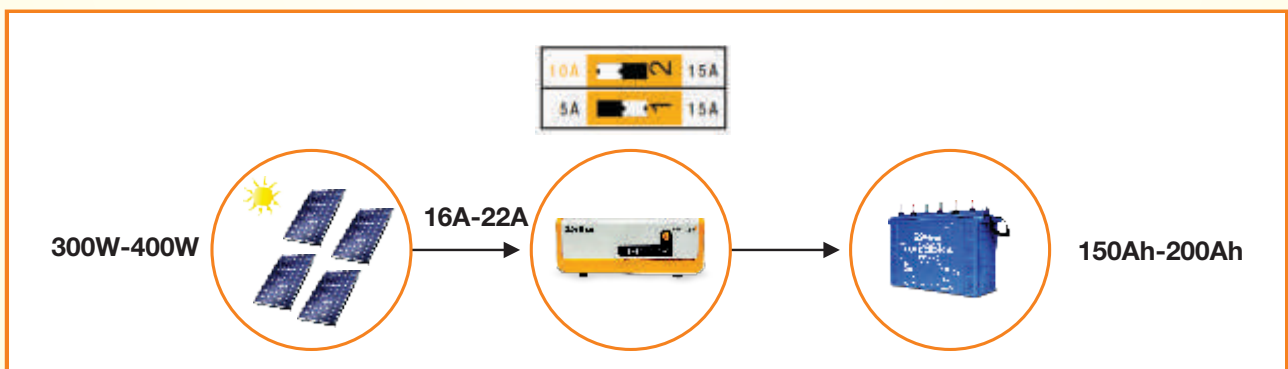
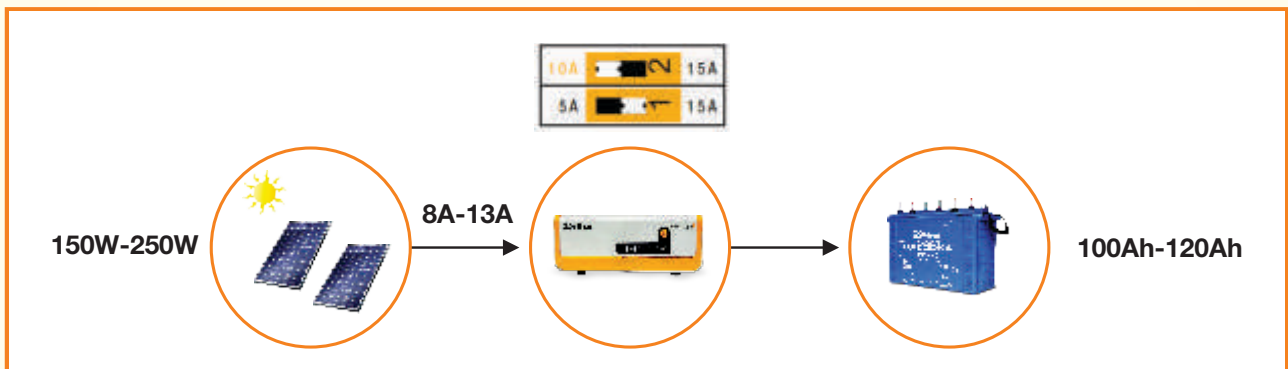
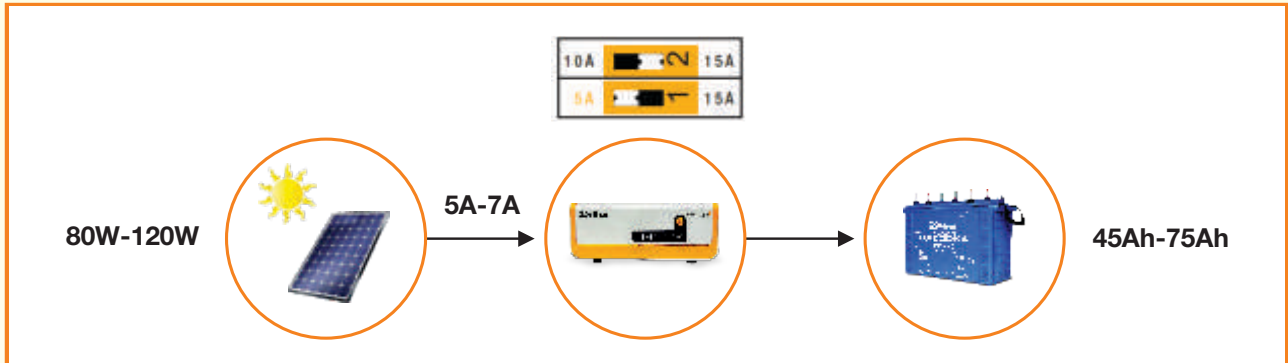


**STATIC BYPASS SWITCH:** This switch helps to bypass the electricity to mains whenever there is a failure in the inverter. This makes the system user-friendly and convenient.





# FREEDOM TO CHOOSE BATTERY AND PANEL SIZE



## CAUTION:

For 300W Solar Panel connect 1 battery of 150Ah.  
However, for 400W-500W Solar Panel connect 2 Batteries of 150Ah/12V each in parallel connection.

# POWERFUL COMBINATION

A mix of the most powerful UPS along with an unmatched choice of Solar Panels for maximum power generation



80Wp - 500Wp

+



Brainy Eco  
1100 / 12V

+



45Ah - 300Ah



## CAUTION:

For 300W Solar Panel connect 1 battery of 150Ah.  
However, for 400W-500W Solar Panel connect 2 Batteries of 150Ah/12V each in parallel connection.

## LOAD CHART

Model	Brainy Eco 1100 / 12V						
Options*							
	Computer	Printer	Television	Tubelight	Fan	Room Cooler	CFL
A	—	—	—	10	—	—	2
B	1	—	—	3	4	—	—
C	—	—	—	4	3	1	—
D	3	1	—	—	—	—	—
E	—	—	1	4	3	—	2

Note: Indicates values only, actual calculation depends on manufacturer's specification.  
\*CFL - 15W, Ceiling Fan - 3 (48mm 100 - 1200 mm sweep), TV - 19-21 inch, Tube light - 40W, Printer - 200W.  
Application: Computer, Televisions, Printer, CFL / Bulbs, Tube Light, Fans, Room Cooler, Mixer Grinder etc.



### Su-Kam Power Systems Limited

Corporate Office : Plot No. 54, Udyog Vihar, Phase VI, Sector-37, Gurgaon - 122001, Haryana, INDIA  
Tel : +91-124-4170500, Fax : +91-124-4038700/1/2, E-mail : info@su-km.com, Website : www.su-kam.com

Service & Support: 1800-102-4423, Sales Enquiry: 1800-102-7555