



**YOUR POWER BACKUP  
SOLUTION IS HERE**



**Su-Kam Power Systems Limited**

**Corporate Office :** 54, Udyog Vihar, Phase VI, Sector-37, Gurgaon-122001,  
Haryana, INDIA. • **Tel :** +91-124-4170500 • **Fax :** +91-124-4038700/1/2  
• **Website :** [www.su-kam.com](http://www.su-kam.com), [www.sukam-solar.com](http://www.sukam-solar.com)



**PRODUCT CATALOGUE**  
(UPS/SOLAR/BATTERIES/POWER ACCESSORIES)



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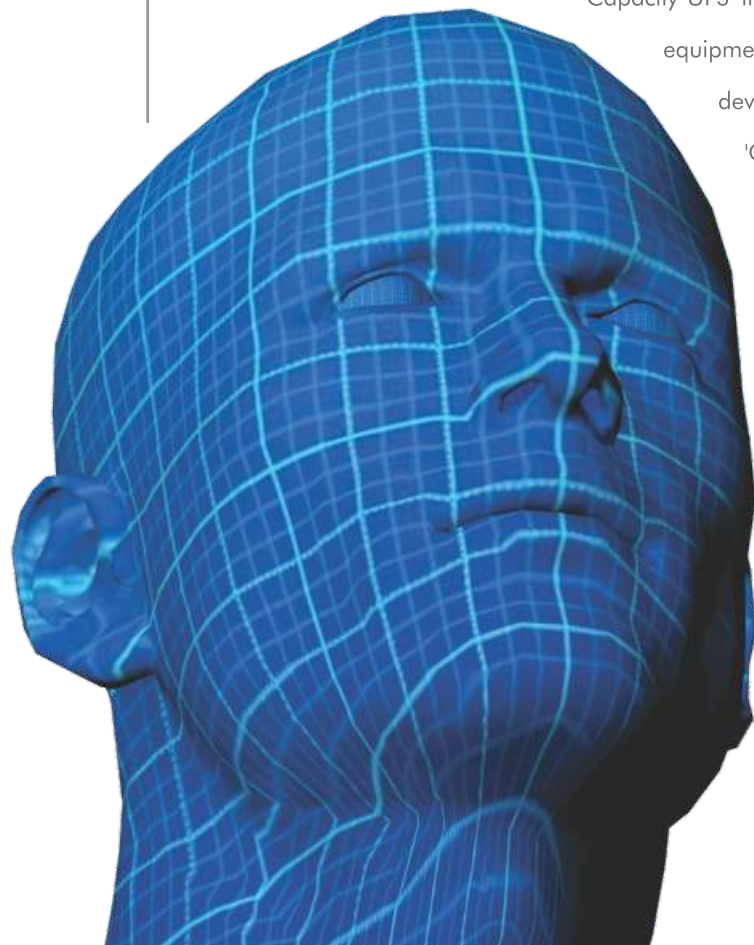
# ABOUT US

The foundation for the Su-Kam success story was laid in the year 1988 when Kunwer Sachdev, the 'Inverter Man of India' took upon himself to revolutionize the power backup industry in the country. Today, Su-Kam has the distinction of being one of the leading power back up, generation & monitoring companies in India with a wide array of best in class products, Government approved in-house R&D center, product innovation, highly efficient manufacturing units, widespread dealer, distributor & service network, robust exports, strong workforce, large project base, numerous awards & recognitions and a long string of firsts to its credit.

It has to its credit, a wide range of over 200 products. The product categories include, Low & High Capacity UPS as well as Home, Commercial, Online & Line interactive UPS catering to capacities up to 100 KVA as well as solar power solutions. The company also specializes in manufacturing Lead Acid, Tubular, SMF, Tall Tubular & Automotive batteries, Battery equalizers, and Battery accessories.

The secret behind the success lies in the foundation of innovation. Su-Kam brought about a 360° transformation in the power backup industry by introducing a long string of firsts to the country - the first 'Sine Wave UPS' that eliminated the irritating humming sound and ensured high quality power output, the first 'MOSFET based UPS', the first ever 'Home UPS' that combined the functions of an inverter and a UPS and eliminated the need for two systems. Su-Kam was also the brains behind developing India's first ever 'High Capacity UPS' that could run ACs, refrigerators and other heavy load equipment. It also has the distinction of being the first company to develop India's first 'Plastic Body Inverter' - the product 'Chick' being adjudged as one of the top innovations of the decade!

The spirit of revolution stays strong and today Su-Kam has made a foray into the solar power sector. In a short span of time, it has made an impact with its mammoth projects and is fast making good on its commitment of **'leaving no corner of the country in the dark'**. From rural to urban landscape, from homes to massive infrastructure development, the Su-Kam Solar presence is deeply felt.

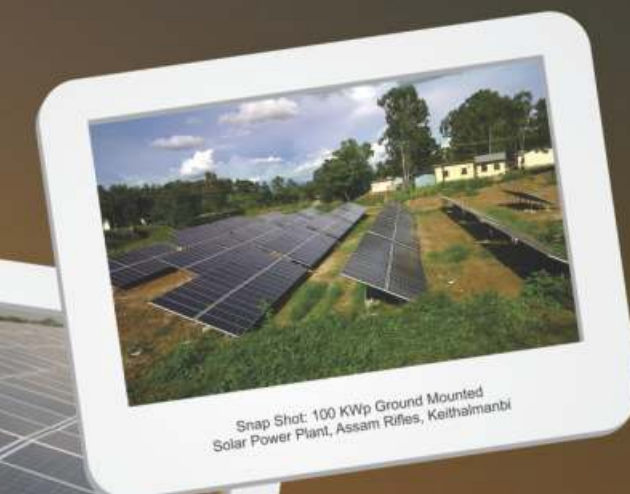




## The Su-Kam Solar Landscape

Su-Kam has successfully implemented many large scale Off Grid and Grid Tie solar roof top installation projects across numerous sites in both India and abroad. It has dotted the landscape with its presence and is well set on its mission of

**Solarizing India And Beyond.**





## Awards & Recognitions

Su-Kam has received a number of awards and accolades over the years for innovation, exceptional products and quality of service provided by the company.



### FEW OF OUR ACCOLADES



Asian Leadership Award for Brand Excellence in Business Innovation



Asia's Most Promising Brand Award



Inc. Innovative 100 Award for "Excellence in Innovation"



Best Overall Talent Management Organization of the year by ET Now



EFY Reader's choice award for SMF batteries



EFY Reader's choice award for UPS systems



Frost & Sullivan Voice of Customer Award



India Inc. 500 "Fastest Growing Organization Award"



Enerbia Award 2011



Entrepreneur of the year award by Franchise India



Business Superbrand



Innovation for India Award by Marico Award Foundation



Consumer Superbrand



Sectoral Award-non SSI (Consumer Electronics) from Export Promotion Council, Government of India



ELCINA - EFY Award for excellence in R & D



West Africa's Best Inverter Brand



West African Branding Excellence Award



Africa's Most Reliable Brand Award



National Award for Quality Product from Government of India



Amity HR Growth Award in Global Business

## Certifications & Validations

Su-Kam has 6 state - of - the - art manufacturing units and each unit adheres strictly to the company's stringent quality consciousness. As a result, it has a string of certifications and recognitions that validate its efforts to maintain the quality of each of its product.







Kunwer Sachdev wins 'Entrepreneur of the Year' award  
Kunwer Sachdev, managing director, Su-Kam Power Systems, has been conferred with the

**Business India**  
THE MAGAZINE OF THE CORPORATE WORLD  
April 2011  
Igniting the power back-up industry  
After establishing Su-Kam as the largest inverter company in India, Kunwer Sachdev is now trying to ignite the power back-up industry.

**INDIA TODAY**  
THE POWER ECONOMY  
KUNWER SACHDEV  
N

**hindustantimes**  
Top bosses should inspire employees  
Kunwer Sachdev of Su-Kam feels a CEO should be able to manage, train and motivate his people  
Mr. Kunwer Sachdev in conversation with The Economic Times

**Awards**  
Su-Kam wins ISA Technovation Award  
Su-Kam has won the prestigious award for excellence in the solar energy category for its 'Solar Power Conditioning Unit'. The Technovation Awards are to recognise the Indian electronics systems design and manufacturing ecosystem.

**Su-Kam**  
Selection of Chik Inverters as one of Top 10 Innovations by 'India Today' comes in same category as Tata Nano, Reva.  
**IGNITED MINDS**  
20 INNOVATORS WHO ARE CHANGING OUR LIVES  
"Plastic body inverter-2002" Designed by Su-Kam, it uses advanced plastics to withstand high temperatures and yet gives a user-friendly finish.

**Su-Kam to set up solar power plants in Punjab, Haryana**

**दैनिक जागरण**  
सोलर पॉवर कंडीशनिंग यूनिट्स लगाई  
कैम पॉवर सिस्टम्स लि. ने पौरीचू के संस्थापक के साथ अथ मध्य प्रदेश वन विभाग के सुदूर कार्यालयों, चौकियों तथा रोज कार्यालयों के लिए स्वच्छ और हरित ऊर्जा उपलब्ध कराई है। पौरीचू के कार्यालय वनों में गहन व सुदूर क्षेत्रों में स्थित हैं, जहां शिड से विद्युत वितरण उपलब्ध नहीं है, इसलिए इन खादों पर पौरीचू सी बिजली का एकमात्र स्रोत है, जो इन खादों को मुख्यतः से जुड़े रहने में मदद करता है। पौरीचू की स्थापना के साथ अथ मध्य प्रदेश वन विभाग के सुदूर कार्यालयों, चौकियों व रोज कार्यालयों के लिए स्वच्छ व हरित ऊर्जा उपलब्ध है जो प्राकृतिक संसाधनों को होने वाली क्षति को है। सोलर पॉवर कंडीशनिंग यूनिट्स का उपयोग करके वनों में वनों व चयन

**Su-Kam Shines at Kissan Mela**  
Yet again Su-Kam gets maximum mileage in the recently concluded Kissan Mela. The customers were left in awe after seeing our best in class innovative products. Thank Savara Times, Ludhiana for covering our story.  
मोबाइल केमो सोलर इन्वर्टर के लिए रिमोट का काम  
सु-कम सोलर इन्वर्टर के लिए रिमोट का काम  
सु-कम सोलर इन्वर्टर के लिए रिमोट का काम







## What is a UPS ?

A power UPS, or UPS, is an electronic device or circuitry that changes direct current (DC) to alternating current (AC). The UPS does not produce any power; the power is provided by the DC source (in this case batteries).

A UPS can produce a square wave, modified sine wave or sine wave depending on circuit design. The two dominant commercialised waveform types of inverters are modified sine wave and sine wave.

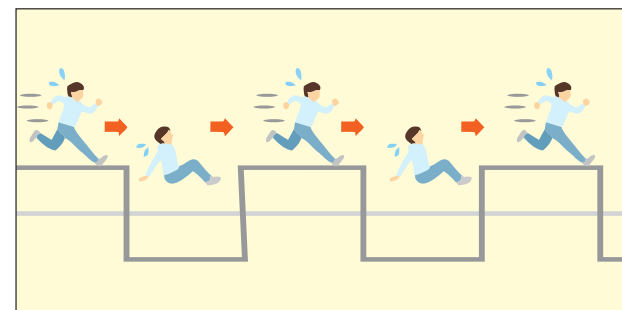
## What are Pure Sine Wave UPS ?

Pure Sine Wave UPS produce cleaner power than a modified sine wave inverter, and our line of pure sine models cover all the complex electronics that are part of our everyday lives. A pure sine wave will replicate the kind of clean power you get from utility grid. Most of the appliances in your home are designed to run on this clean power. Therefore appliances run more efficiently than they might on modified sine wave UPS.

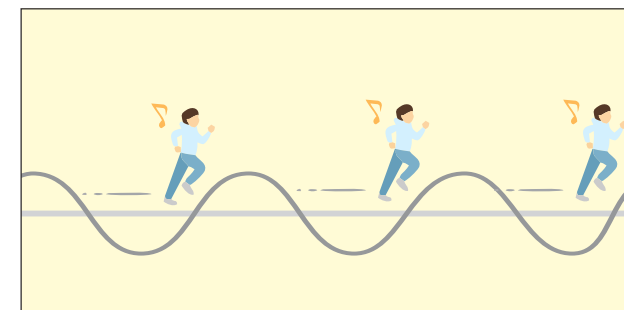
Devices that run better on a pure sine wave UPS include: Server, Computer, Laser Printer, AC, Photocopier, Treadmill, Dentist chair, Water Pump 1HP, Refrigerator, Fan, Television, Hair dryer, Washing Machine, Lights, Air

Cooler, Water Purifier, Rice Cooker, Induction Stove, Juicer, Vacuum Cleaner, Music System, Game Console, Dishwasher, Microwave and many sophisticated and sensitive medical devices. Without a clean power source, these types of devices simply will not run, or you may risk shortening their lifespan and causing them to fail prematurely.

Whether you are looking for power UPS for Household, Commercial or Industrial application we have the pure sine wave UPS best suited for your needs. We offer power UPS with built-in chargers.



Appliances running on square wave



Appliances running on pure sine wave



Design Patent & Technology Patents for Su-Kam Pure Sine Wave Series

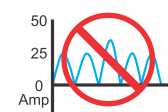


## 8 MUST HAVE FEATURES IN YOUR UPS

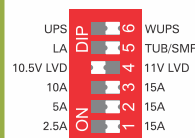


A UPS that helps set a **UNIQUE BOOST VOLTAGE** that ensures proper battery charging in all weather conditions with the help of a temperature sensor.

Temperature (°C)	Bulk Voltage Setting (Tubular Battery)	Specific Gravity
-10	14.89V	13.30
0	14.85V	12.94
10	14.67V	12.85
20	14.49V	12.71
25	14.40V	12.65
30	14.31V	12.61
40	14.13V	12.53
50	13.95V	12.42



**Ripple free charging** current to ensure proper battery charging, higher backup and longer battery life.



A UPS that can charge various batteries of different capacities as per the charging current required with the help of **DIP switch** provided on the inverter panel thus ensuring Increased Battery Life.

Example: 50Ah battery will be charge with 5Amp and 200Ah battery will be charged with 15Amp



Power Backup that lets you choose the level of **Battery Reserve**, Low Voltage Disconnect (LVD). Choosing the battery reserve higher than 10.5V i.e. 11V helps in recharging the battery fully and faster. It also

acts like reserve power for emergency use with the help of DIP switch at the back panel.

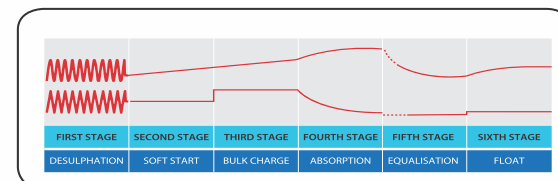
More reserve = More battery life



UPS with compatible **BlueTooth Application** provides full access to control and configure different setting of the UPS like System Status: Mains/Backup mode Battery Status Grid Status, Faults Status & Recovery Solution. Apart from checking the status of your system you can switch it ON/OFF whenever required.



**Six stage battery charging** ensures healthy charging & longer battery life that provides current and voltage as per the requirement of the charging stage and temperature of the battery.

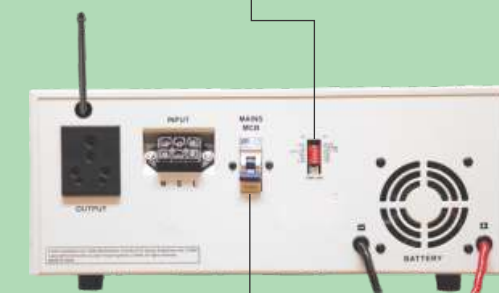
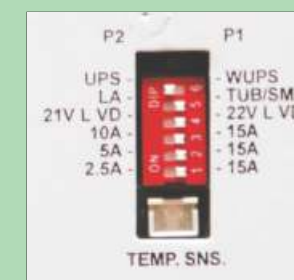
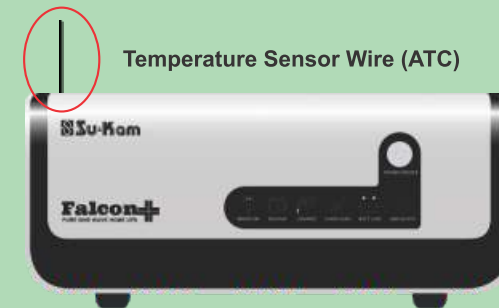


UPS that **charges battery** even when **voltage falls below 150V**; useful for places with severe voltage fluctuation and erratic power conditions.

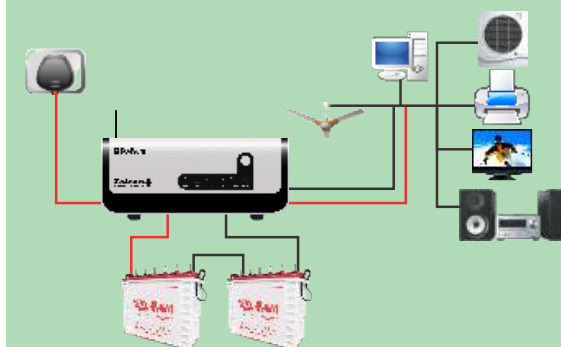
**Falcon Series** can charge batteries at optimal charging current even when voltage falls as low as **85V mains**.

## Pure Sinewave UPS

### Falcon+



### Back Panel Falcon+



Falcon+ Pure Sine Wave UPS is Bluetooth compatible which provides easy access and control to all the running parameters like System Status: Mains/Backup Mode, Battery Status, Grid Status, Faults Status & Recovery Solution.

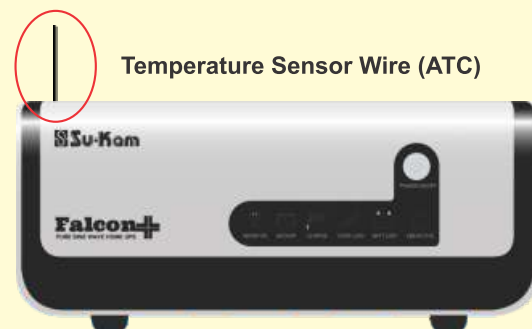
### FEATURES

- 20KHz frequency design ensures noiseless operations.
- Built-in Galvanic Isolation transformer for charging circuitry on mains.
- Pure Sinewave inverter with inbuilt battery charger.
- ATC Technology with temperature sensor wire provided at the back panel increases battery life by minimum 6 months by providing optimum charging as per the climate which reduces water topping frequency.
- Transfer Time faster than UPS - perfect for running sensitive equipment like computers, printers etc.
- Standard Model 220V/50Hz (Models on order basis: 110V/60Hz and 220V/60Hz).
- Ripple free current for battery charging enhances the life of battery and increases the backup time as well.
- 6 Stage battery charging technology helps in increasing the battery life by providing healthy charging.
- Suitable for countries with power fluctuations as it charges batteries at an optimal charging current even when voltage falls as low as 85V mains.
- Low Voltage Disconnect (LVD) choosing the battery reserve higher than 10.5V i.e. 11V helps in recharging the battery fully and faster. It also acts like reserve power for emergency use with the help of DIP switch at the back panel.
- Bluetooth Features help to control and configure setting as per user requirements like System Status: Mains/Backup mode, Battery Status, Grid Status, Faults Status, Recovery Solution & ON/OFF feature.
- Charger compatible with any battery size between 18Ah - 200Ah; selectable charging currents provided are 2.5Amp, 5Amp, 10Amp & 15Amp. This can be selected either through the two way slider switch at back panel or through the Su-Kam i-Manager Bluetooth mobile application which provides more options for selection.
- Soft Start Technology keeps the machines running longer by reducing their startup stress by reducing the torque applied to the electric motor.
- Automatic By-Pass System, in case of UPS failure the automatic by-pass system present helps to by-pass electricity to mains so that uninterrupted power supply can be enjoyed by the user.
- Compatible with all kinds of generators especially rural make ones. When generators especially rural make ones provide electricity, their frequency may range between 42 to 65 Hz. In such a scenario inverters usually cut the supply and start running on backup mode. However, we have fitted our UPS in such a way that they continue to provide hassle free charging.

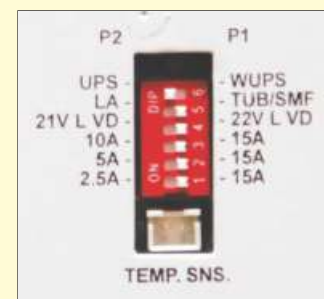


## Pure Sinewave UPS

### Falcon+

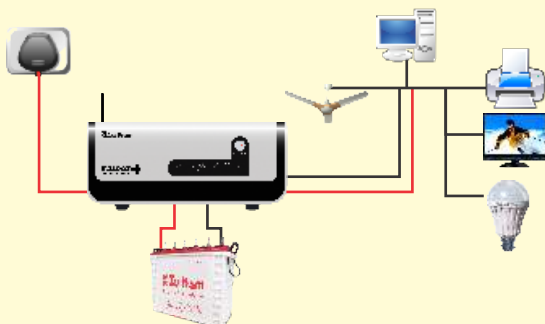


Temperature Sensor Wire (ATC)



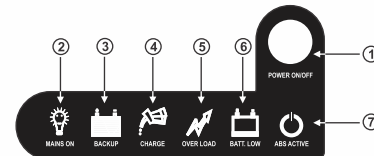
MCB

Back Panel Falcon+



- High Crest Factor of 5:1, enables to run loads that require high starting current, ideal for appliances that need high starting and low running current.
- It also provides extra protection with MCB on the UPS that protects all the appliances connected with it.
- Compliance to international test standards.

#### FRONT LED PANEL INDICATIONS



1. ON / OFF Switch: This glows continuously to indicate the UPS is in power ON mode and in power OFF mode the LED does not glow.
2. MAINS ON: This LED display icon glows to show that the mains grid power is available.
3. BACKUP: This LED display icon glows when mains grid power is not available and the UPS is providing back up.
4. BATTERY CHARGING/CHARGED: This LED display icon will glow in an on-and-off pattern during charging the batteries from main grid power.

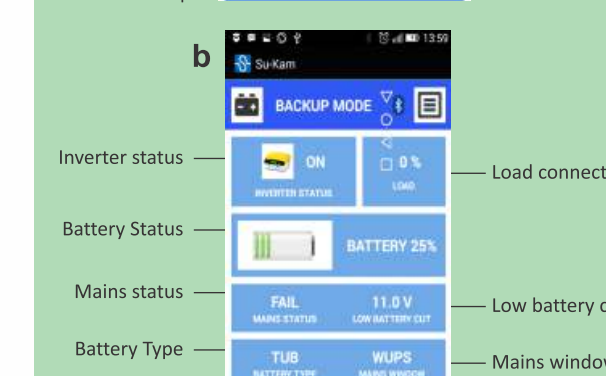
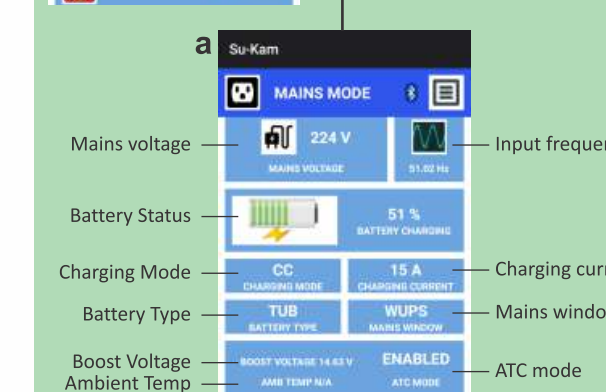
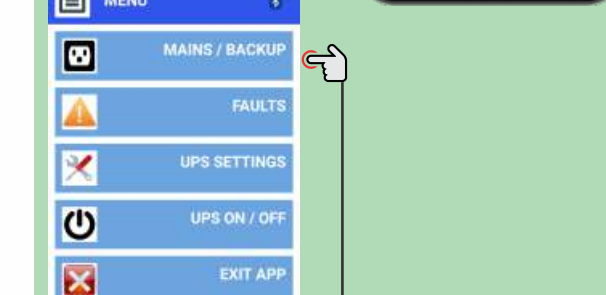
When battery is fully charged it glows continuously.

5. OVERLOAD: This LED display icon glows in red in an on-and-off pattern along with the buzzer beeping similarly incase of overload condition. The UPS will try maximum 8 times before shutting down if the overload is not reduced. It can be reset by reducing the load and then switching OFF the power button on the front panel and switching it ON after 3 seconds.

SHORT CIRCUIT: This LED will glow continuously along with buzzer beep in case of a short circuit in the system output load. The UPS will try maximum 4 times before shutting down, after this the short circuit has to be remove and the UPS has to be reset by switching off the power button on the front panel and switching it on after 3 seconds.

6. BATTERY LOW: This LED display icon glows in red in an on-and-off pattern along with buzzer beep to indicate low level of battery charge or battery close to discharge. As the battery voltage reaches the selected cut-off limit, which is either 10.5V / 11V in this case UPS will shut down and the LED icon will glow in red continuously. The UPS will resume working only after battery start charging again from mains.
7. Automatic Bypass Active: This LED display icon will glow continuously till the power button of inverter is on.

### Falcon+



#### SU-KAM i-Manager BLUETOOTH APPLICATION

**NOTE:** The Su-Kam i-Manager application is available on android and IOS software.



Follow the steps to download the app on your phone:-

1. Open Google play store and type 'Su-Kam i-Manager'
2. Click on the first link
3. Click on the install link to start download
4. The Su-Kam i-Manager App asks permission to access your device. To continue download click on accept.

Follow the steps to connect your app to your Falcon+ UPS

1. Open the Su-Kam Shortcut icon on home screen of your mobile
2. Click on 'Bluetooth' connectivity options to connect your inverter.
3. Click on Scan to detect your inverter.
4. Now click on the Device ID detected by your app. (Add picture of the shot)
5. Click on 'Continue' on the welcome screen. (Add picture of the shot)

6. This is the main menu, select a Mains/Backup Mode

- a. Mains Mode displays the following criteria:

- Mains Voltage,
- Input frequency
- Charging Mode is Constant Current CC
- Battery charge percentage,
- Battery type
- Charging current
- Mains window selection WUPS/UPS mode
- Status of ATC mode
- Ambient Temperature
- Boost Voltage

- b. Backup Mode displays the following criteria:

- UPS Status is ON
- Percentage of load connected
- Battery percentage available
- Mains Status Fail
- Low Battery cut will display the chosen option
- Type of Battery selected

7. Going back to the main menu and selecting Faults icon will show a list of faults that one may get during the use, they are:

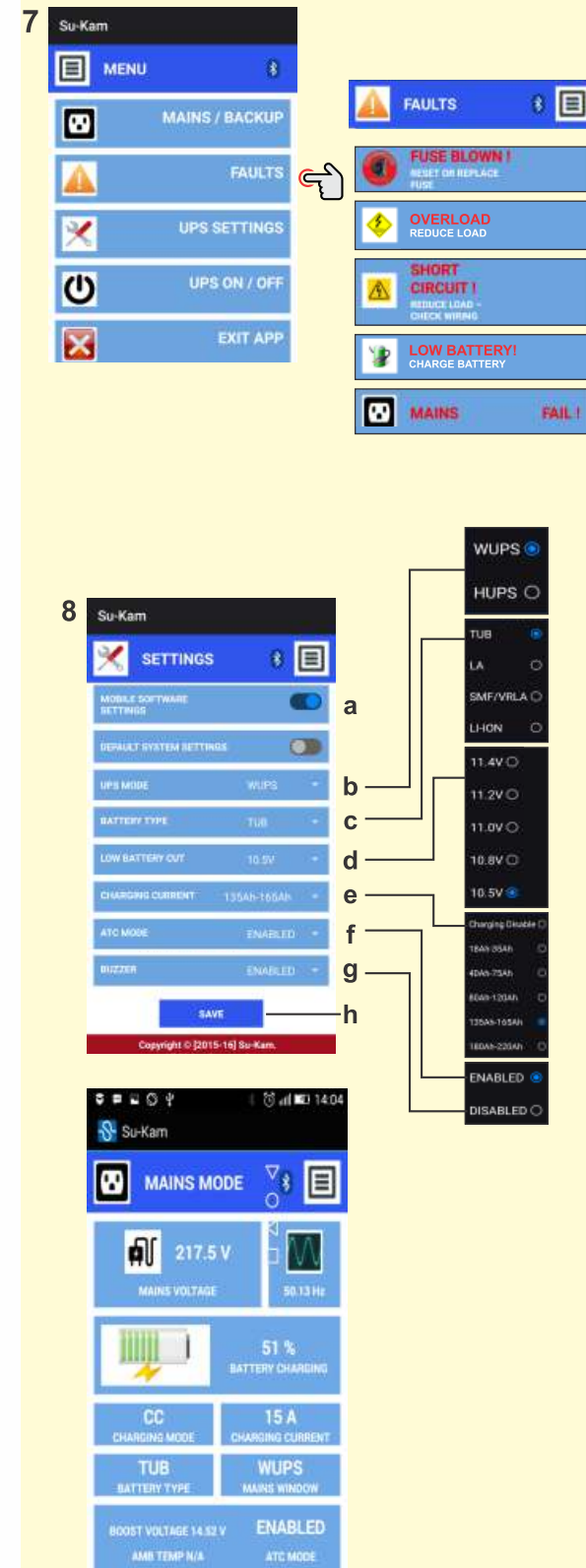
**FUSE:** When fuse trips a message will appear on screen: MCB trip, only after fixing the fuse will it display FUSE OK.

**OVERLOAD:** Error will occur if more than the rated load is connected, system will try maximum 8 times to restart, incase the overload is reduced then system will immediately start.



## Pure Sinewave UPS

### Falcon+



Falcon+ pure sine wave UPS is Bluetooth as well as Solar compatible which provides easy access and control to all the running parameters like System Status: Mains/Backup mode, Battery Status, Grid Status, Faults Status & Recovery Solution. The product is great value for money.

#### Applications\*

Refrigerator, Fan, Television, Hair dryer, Washing Machine, Lights, Air Cooler, Water Purifier, Rice Cooker, Induction Stove, Juicer, Vacuum Cleaner, Music System, Game Console, Dishwasher, Computer, Laser Printer, IT Load, Modem, Server.

Design Registration No.: 25282 & 11727  
Technology Patent: Patent Protected

#### Available Models

Model	Dimension (LxWxH) in mm	Weight
Falcon+ 1100/12V	302x293x132	10.64Kg
Falcon+ 1600/24V	407x304x172	15.545 Kg

\*Depending on Model Capacity

## Pure Sinewave UPS

### Falcon ECO - 1000



Falcon Eco UPS is a smart, stylish and affordable Pure Sine Wave UPS. Equipped with 6 stage battery charging, resettable fuse and other great features, Falcon Eco is the best in its category. It is ideal for areas which have low voltage problems since it is designed to efficiently charge battery at input voltage as low as 90V. It is India's most cost-effective and affordable UPS.

#### FEATURES

- 20KHz frequency design ensure noiseless operations.
- Built-in Galvanic Isolation transformer for charging circuitry on mains.
- Pure Sinewave UPS with inbuilt battery charger.
- Transfer Time faster than UPS - perfect for running sensitive equipment like computers, printers etc.
- Standard Model 220V/50Hz (Models on order basis: 110V/60Hz and 220V/60Hz).
- Ripple free current for battery charging enhances the life of battery and increases the backup time as well.
- 6 Stage battery charging technology helps in increasing the battery life.
- Suitable for countries with power fluctuations as it charges batteries at an optimal charging current even when voltage falls as low as 90V mains.
- Soft Start Technology keeps the machines running longer by reducing their startup stress by reducing the torque applied to the electric motor.
- Compatible with all kinds of generators especially rural make ones. When generator especially rural make ones provide electricity their frequency may range between 42 to 65 Hz, in such a scenario UPS usually cut the supply and start running on backup mode. But we fitted our UPS in such a way that they continue to perform provide hassle free backup.
- High Crest Factor of 3:1, enables to run loads that require high starting current, ideal for big appliances that need high starting and low running current.
- It also provides extra protection with MCB/Fuse on the UPS that protects all the appliances connected with it.
- Compliance to international test standards.
- Solar Compatible



## Pure Sinewave UPS

### Falcon ECO 2000



#### FRONT LED PANEL INDICATIONS

1. ON / OFF Switch: This glows continuously to indicate the UPS is in power ON mode and in power OFF mode the LED does not glow.
2. MAINS ON: This LED display icon glows to show that the mains grid power is available.

FUSE BLOWN: In case of short circuit or mains available mode the MAINS LED will start blinking in an on-and-off pattern in models 1000/12V and 2000/24V and the resettable fuse at the back panel comes out in model 1000/12V. In 2000/24V model MCB trips to resume the working or the UPS mend the resettable fuse or turn on the MCB as per the model.

In case of overload condition the LED display will glow in an on-and-off pattern with a buzzer beep. To restore the mains line, reduce the load and reset the resettable fuse at the back panel.

3. BACKUP: This LED display icon glows when mains grid power is not available and the Home UPS is providing back up.

4. BATTERY CHARGING/CHARGED: This LED display icon will glow in an on-and-off pattern during charging the batteries from main grid power.

When battery is fully charged it glows continuously.

5. OVERLOAD: This LED display icon glows in red in an on-and-off pattern along with the buzzer beeping similarly in case of overload condition. The UPS will try maximum 8 times before shutting down if the overload is not reduced. It can be reset by reducing the load and then switching OFF the power button on the front panel and switching it ON after 3 seconds.

SHORT CIRCUIT: This LED will glow continuously along with buzzer beep in case of a short circuit in the system output load. The UPS will try maximum 4 times before shutting down, after this the short circuit has to be removed and UPS has to be reset by switching off the power button on the front panel and switching it on after 3 seconds.

6. BATTERY LOW: This LED display icon glows in red in an on-and-off pattern along with buzzer beep to indicate low level of battery charge or battery close to discharge. As the battery voltage reaches the selected cut-off limit, which is 10.5V in this case inverter will shut down and the LED icon will glow in red continuously. The UPS will resume working only after battery start charging again from mains.

#### Applications\*

Fan, Television, Hair dryer, Washing Machine, Lights, Air Cooler, Water Purifier, Rice Cooker, Induction Stove, Vacuum Cleaner, Music System, Game Console, Dishwasher, Computer.

Design Registration No.: 239399

Technology Patent: Patent Protected

#### Available Models

Model	Dimension (LxWxH) in mm	Weight
Falcon ECO 1000/12V	275x270x121	8.7 Kg
Falcon ECO 2000/24V	405x285x170	15.5 Kg

\*Depending on Model Capacity

## Solar Hybrid UPS

### Brainy Eco 1100



### Brainy Eco 1600



Brainy Eco Solar Hybrid UPS is India's FIRST of its kind. It gives you the flexibility of charging the batteries through both grid and solar - according to your choice. It has the dual function of being an inverter as well as an off - grid solar power generation system. Brainy Eco is the best in every parameter - best price, best technology, best design, best features and most importantly, best performance.

#### FEATURES

- Intelligent Battery Charge Sharing - The main preference for battery charging is through Solar to reduce the power used from the Grid, thus saving money on electricity bills.
- Pure Sinewave UPS with inbuilt 30A Solar Charge Controller.
- ATC Technology provides adequate boost voltage as per the actual temperature conditions. Temperature sensor wire provided at the back panel, increases battery life by minimum 6 months.
- User settable Grid/Solar Priority. The user can select Grid Priority switch in high power cut conditions and Solar Priority switch in low power cut conditions.
- Battery charging is done through Solar. It has 98% battery charging efficiency thus increasing battery life by at least 6 months.
- Powerful Charging even at low voltage of 90V.
- 6 Stage battery charging technology helps in increasing the battery life and ensures necessary cooldown time provided to the system as well as full utilisation of lead during the charging cycle.
- Low Voltage Disconnect (LVD) choosing the battery reserve higher than 10.5V i.e. 11V helps in recharging the battery fully and faster, it also acts like reserve power for emergency use with the help of DIP switch at the back panel.
- Automatic By-Pass System, in case of UPS failure the automatic by-pass system present helps to by-pass electricity to mains so that uninterrupted power supply can be enjoyed by the user.
- 4th Generation Processor. The 4th Generation Micro Processor is the most advanced and latest technology in power solutions. It is small in size efficient, has high speed processor and has the ability to multitask.
- Over Current Protection- Charging current from the Solar PV array is continuously monitored. If the Charging Current exceeds 30 amperes, then Charge Controller stops further charging. The Charge Controller restores the charging process after 3.5 minutes automatically.
- Reverse Current Flow Protection- Solar Charge Controller blocks any flow of current from the battery to Solar PV array.
- PV Panel Current Reverse Connection Protection- When PV positive and negative wires are reversed at PV terminals then only LED glows at the back panel.

#### Applications\*

Refrigerator, Fan, Television, Hair dryer, Washing Machine, Lights, Air Cooler, Water Purifier, Rice Cooker, Induction Stove, Juicer, Vacuum Cleaner, Music System, Game Console, Dishwasher, Computer, Laser Printer.

Design Registration No.: 239399

Technology Patent: Patent Protected

Trademark No.: 1634249

#### Available Models

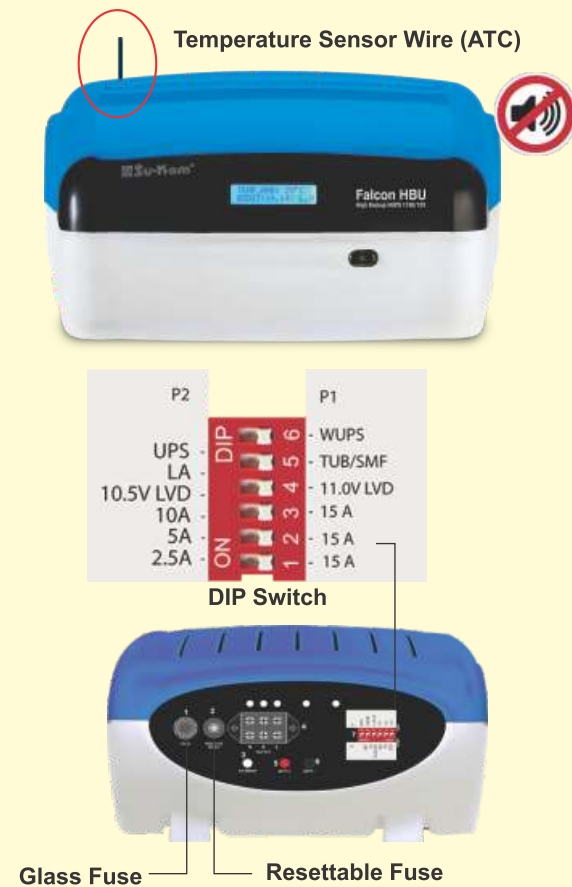
Model	Dimension (LxWxH) in mm	Weight
Brainy ECO 1100/12V	302x311x128	11.109 Kg
Brainy ECO 1600/24V	407x304x172	16.305 Kg

\*Depending on Model Capacity

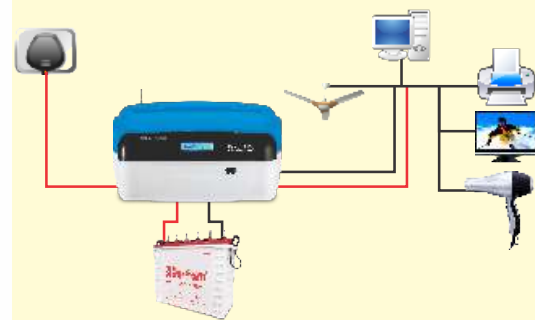


## High Backup UPS

### Falcon HBU



### Falcon HBU



This product is India's first UPS to get a 4 star efficiency rating from Bureau of Energy Efficiency (BEE), Government of India. Falcon HBU takes very little electricity for its own functioning hence reducing the electricity bills and also increasing back up time. The Bluetooth mobile application provides many more choice on various settable criteria.

### FEATURES

- 20KHz frequency design ensure noiseless operations.
- Pure Sinewave UPS with inbuilt battery charger.
- ATC Technology with temperature sensor wire provided at the back panel, increases battery life by minimum 6 months by providing optimum charging as per the climate conditions which reduces water topping frequency.
- Transfer Time faster than UPS - perfect for running sensitive equipment like computers, printers etc.
- Standard Model 220V/50Hz (Models on order basis: 110V/60Hz and 220V/60Hz).
- Revolutionary Bi-Directional High Frequency Technology- both UPS working & Battery charging is done at the same time through the same circuit.
- Ripple free current for battery charging enhances the life of battery and increases the backup time as well.
- 6 Stage battery charging technology helps in increasing the battery life by providing healthy charging.
- Low Voltage Disconnect (LVD) - choosing the battery reserve higher than 10.5V i.e. 11V helps in recharging the battery fully and faster, it also acts like reserve power for emergency use with the help of DIP switch at the back panel.
- Bluetooth Features help to control and configure setting as per user requirements like System Status: Mains/Backup mode, Battery Status, Grid Status, Faults Status & Recovery Solution, turning UPS ON/OFF.
- Charger compatible with any battery size between 18Ah - 200Ah; selectable charging current provided are 2.5Amp, 5Amp, 10Amp & 15Amp. This can be selected either through the two way slider switch at back panel or through Su-Kam i-Manager Bluetooth mobile application which provides more options for selection.
- Displays backup on the current time in hours and minutes format on the display panel.
- Innovative plastic body manufactured with high quality industrial plastic that is completely shock proof and can withstand temperature upto 120° C.

## High Backup UPS

### Falcon HBU

- 1 SU-KAM WELCOMES YOU
- 2 MODEL FALCON HBU 1100
- 3 MAINS STATUS FAIL
- 4 BACKUP TIME
- 5 TEMP\_AMB: 28C BOOST:14.14 V L.A.
- 6 ATTENTION BATTERY LOW
- 7 BATTERY LOW SHUTDOWN
- 8 BATTERY HIGH SHUTDOWN
- 9 SHORT CIRCUIT SHUTDOWN
- 10 ATTENTION OVERLOAD >100%
- 11 HIGH TEMPERATURE SHUTDOWN
- 12 OVERLOAD SHUTDOWN
- 13 CURRENT SEL:10A BATT:100 135 AH
- 14 BATT\_LEVEL:094
- 15 UPS/WIDE UPS MODE FAN LIGHT LOAD

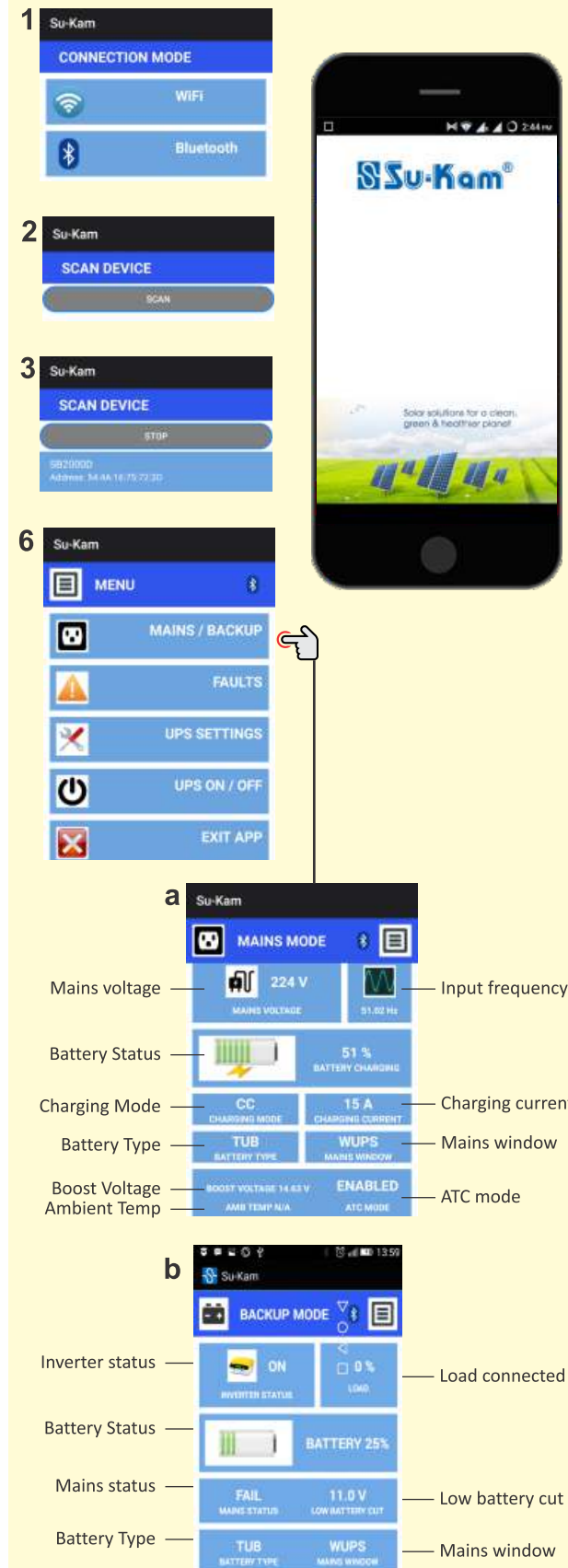
#Values displayed are for reference only.

- High Frequency Technology reduces the weight of this UPS by 60%.
- Powerful enough to run 7 computers.
- Soft Start Technology keeps the machines running longer by reducing their startup stress by reducing the torque applied to the electric motor.
- Automatic By-Pass System - in case of UPS failure the automatic by-pass system present helps to by-pass electricity to mains so that uninterrupted power supply can be enjoyed by the user.
- High Crest Factor of 3:1, enables to run loads that require high starting current, ideal for big appliances that need high starting and low running current.
- Compliance to international test standards.



## High Backup UPS

### Falcon HBU



#Values displayed are for reference only.

### SU-KAM i-Manager BLUETOOTH APPLICATION

**NOTE:** The Su-Kam i-Manager application is available on android and IOS software.



Follow the steps to download the app on your phone:-

1. Open Google play store and type 'Su-Kam i-Manager'
2. Click on the first link
3. Click on the install link to start download.
4. The Su-Kam i-Manager App asks permission to access your device. To continue download click on accept.

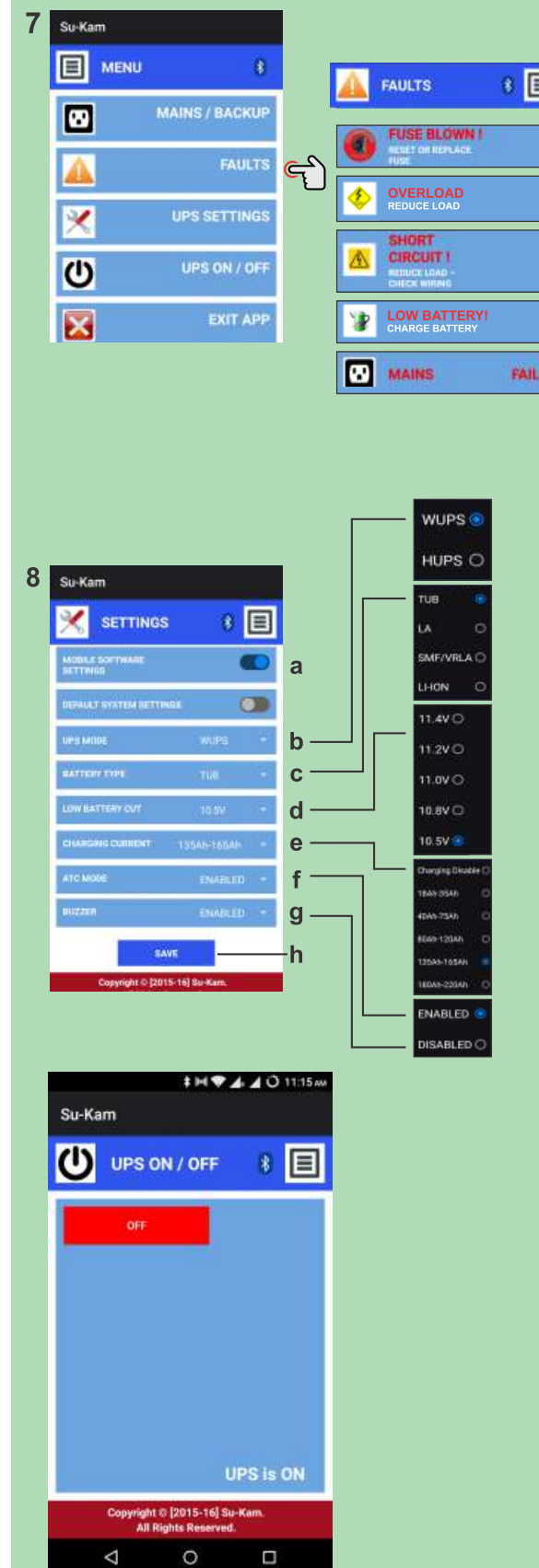
Follow the steps to connect your app to your Falcon+ UPS

1. Open the Su-Kam Shortcut icon on home screen of your mobile.
2. Click on 'Bluetooth' connectivity options to connect your UPS.
3. Click on Scan to detect your UPS.
4. Now click on the Device ID detected by your app.
5. Click on 'Continue' on the welcome screen.
6. This is the main menu, select a Mains/Backup Mode
  - a. Mains Mode displays the following criteria:
    - Mains Voltage,
    - Input frequency
    - Charging Mode is Constant Current CC
    - Battery charge percentage,
    - Battery type
    - Charging current
    - Mains window selection WUPS/UPS mode
    - Status of ATC mode
    - Ambient Temperature
    - Boost Voltage
  - b. Backup Mode displays the following criteria:
    - Inverter Status is ON
    - Percentage of load connected
    - Battery Charge status in Hours and Minutes
    - Mains Status Fail
    - Low Battery cut will display the chosen option
    - Type of Battery selected

7. Going back to the main menu and selecting Faults icon will show a list of faults that one may get during the use, they are:  
 FUSE: When fuse trips a message will appear on screen: FUSE BLOWN, only after fixing the fuse will it display FUSE OK.  
 OVERLOAD: Error will occur if more than the rated load is connected. System will try maximum 8 times to restart. Incase the overload is reduced then the system will immediately start working after pressing the reset switch given on the front panel else it will shutdown.

## High Backup UPS

### Falcon HBU



**SHORT CIRCUIT:** in this case the system will try to restart maximum 4 times. If the short circuit is still present then the system will shut down. Remove the short circuit and press reset provided on the front panel will restart the device.

**BATTERY:** If battery voltage falls below the selected level of 'Battery Low Voltage Disconnect', the application will show Battery Low message.

**MAINS :** Incase of failure of main grid, Mains Fail message will appear on screen. Mains Ok will appear when Mains is connected

8. Return to Main menu and click on UPS Settings to select software setting.
  - a. Mobile Software Settings : ENABLE to change the settings.
  - b. Choosing the WUPS /UPS Mode.  
 WUPS Mode- Choose this mode for normal appliances, which run on an input voltage range of 105-280V.  
 UPS Mode- Choose this mode for sensitive appliances, which run on an input Voltage Range of 185-265 V.
  - c. Battery Type: Select the type of Battery to be paired with the UPS. The options given are Tubular, Lead Acid, SMF/VRLA and Lithium Ion.
  - d. Select the Low Battery Cut to set the battery voltage below which the UPS will cut the supply. The options given are 10.5 V, 10.8V, 11.0V, 11.2V and 11.4V.
  - e. Set the charging current through which the battery will get charged. The options provided are Charging disabled, 18Ah-35Ah, 40Ah-75Ah, 80Ah-120Ah, 135Ah-165Ah, 180Ah-220Ah.
  - f. Click on ATC mode to enable or disable the feature.
  - g. Click on Buzzer to enable or disable the sound alerts.
  - h. Press Yes to Save the settings selected.
- Return to the main menu by pressing ok
11. When on Backup Mode, the UPS can be switched ON or OFF from the app depending on the user requirement.
12. Last option is to Exit The App

### Applications\*

Refrigerator, Fan, Television, Hair dryer, Washing Machine, Lights, Air Cooler, Water Purifier, Rice Cooker, Induction Stove, Juicer, Vacuum Cleaner, Music System, Game Console, Dishwasher, Computer, Laser Printer, IT Load.

Design Registration No.: 239399

Technology Patent: Patent Protected

### Available Models

Model	Dimension (LxWxH) in mm	Weight
Falcon HBU 1100/12V	308x310x170	3.5 Kg
Falcon HBU 1600/24V	308x310x170	3.7 Kg

\*Depending on Model Capacity



## Fusion ECO

### Fusion ECO UPS (1P-1P)



Su-Kam introduces Fusion Eco - India's top rated UPS. Apart from the normal loads, Fusion Eco is ideal for your heavy loads like printers, servers, computers, routers, AC, Dentist Chair etc. This eliminates the need for you to have a separate UPS for your domestic and IT loads.

### FEATURES

- Switch over time is zero.
- Noiseless operation.
- Compatible with local generators.
- It can charge battery at low voltage (90V).
- It can run commercial, domestic and IT loads.
- Automatic By-Pass System : in case of UPS failure the automatic by-pass system present helps to by-pass electricity to mains so that uninterrupted power supply can be enjoyed by the user.

### Applications\*

Server Loads, Inverter AC 1.5 tons with 5 Star rating, Air Cooler, Dentist Chair, Treadmill, Computer Printer, Load running off upto 1 HP Motor.

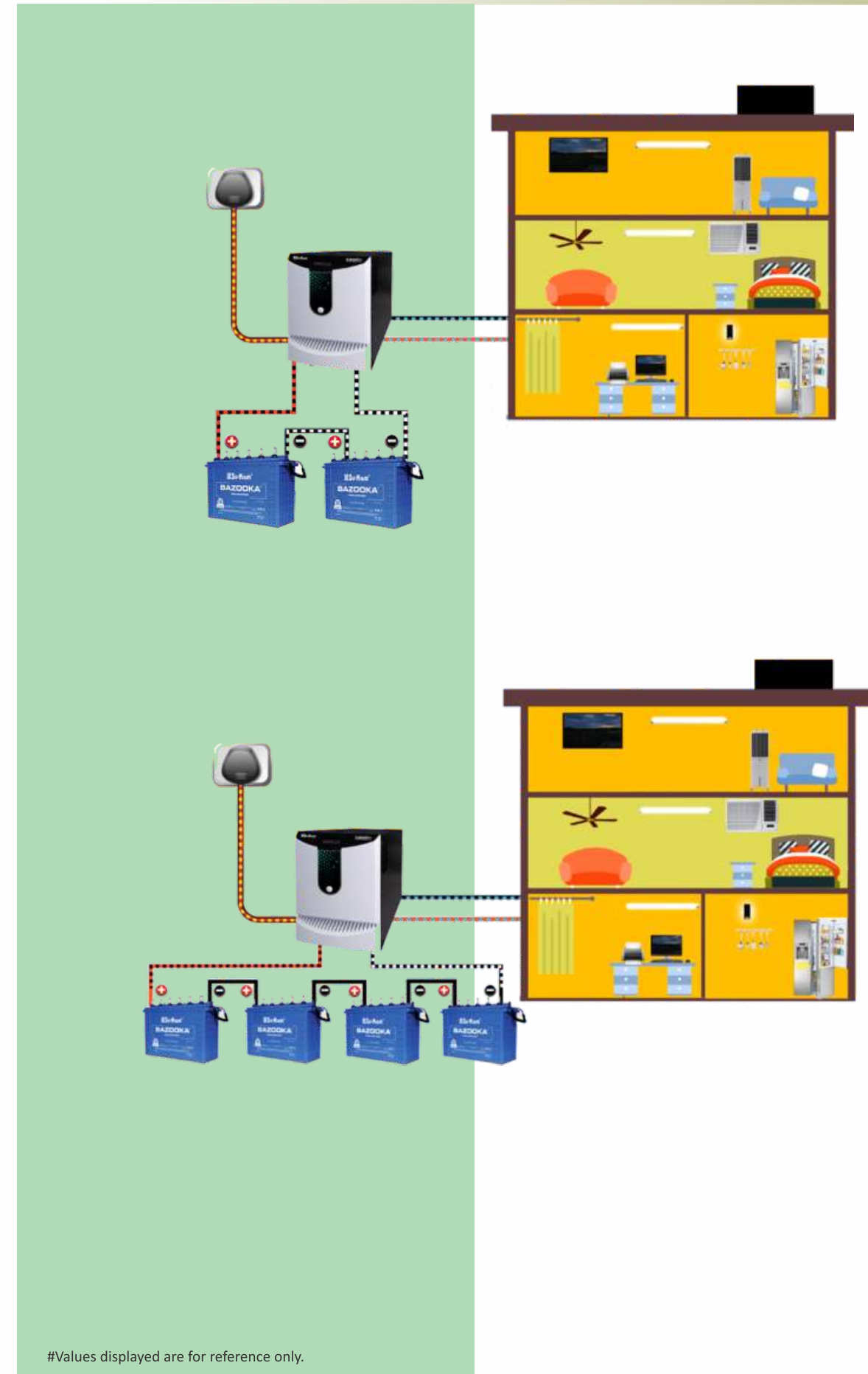
Design Registration No.: 239399  
Technology Patent: Patent Protected

### Available Models

Model	Dimension (DxWxH) in mm	Weight
Fusion ECO 2500/24V	395x245x355	23.2 Kg
Fusion ECO 3500/48V	395x245x355	31.7 Kg

\*Depending on Model Capacity

## Fusion ECO



#Values displayed are for reference only.



## Solar Power Based Device DC System

### Solar PV – Solar Home Lighting System



Su-Kam's Solar Home Lighting System (SHLS) lights up your home with the power of sunlight. The electricity is stored in the battery and used for carrying load as per requirement. SHLS is designed as an easy-to-install kit and comes with LED lamps with a capacity to light up your home for several hours. In the absence of sunlight, you can charge the system through an external charger by directly connecting to the mains. It has a compact system with 7.2Ah/12V S.M.F. in-built battery and a controller that protects battery from overcharging or deep discharge.

#### FEATURES

- Dusk Till Dawn Sensor - Solar Home Lighting System (SHLS) has an in-built sensor that automatically senses light and starts working from the dawn till dusk.
- Grid Charging (Optional) - Solar Home Lighting System (SHLS) has an additional option to charge it from mains as well. You can choose for either solar or grid charging facility.
- In-built Charge Controller - Solar Home Lighting System (SHLS) regulates the power during the battery charging and auto cuts when battery gets completely charged. It also controls the reverse current flow in the night to solar panel.
- Zero Idle Current - Generally, other chargeable devices use little amount of stored power while in idle condition. But the Solar Home Lighting System (SHLS) is smartly designed to consume zero power from the battery while in idle condition.
- Increase Battery life - Solar Home Lighting System (SHLS) uses pure DC form of power to charge the battery. It not only provides safe charging but also increases the battery life by several years.
- High/Low Voltage Protection for Battery - An in-built control unit in Solar Home Lighting System (SHLS) provides complete protection to the battery during high voltage situation.
- Deep Battery Discharge Protection - A compact control unit in SHLS protects the battery from deep battery discharge.
- Output Overload/Short Circuit Protection - The smart technology protects the Solar Home Lighting System (SHLS) during output overload. It also protects the device from short circuits.

#### Applications

Radio, Mobile Charging, DC LED Bulb, DC Fan, DC Television.

## Solar Power Based Device DC System - 120

### DC System

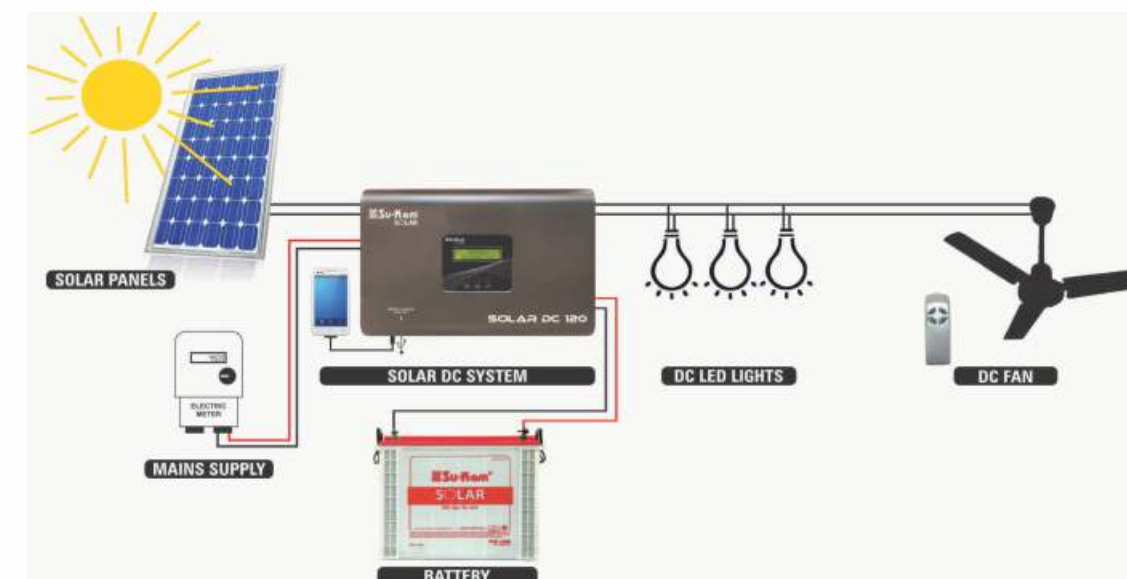


The Su-Kam Solar DC System is an innovative environment-friendly, complete home lighting solar solution that has the power to remove darkness from millions of lives.

A standard package can light up to one 12V 25W DC (BLDC) fan, two 3W LED along with USB mobile charger point. DC light, DC fan, DC TV and other DC appliances up to 120W can be run very easily with this system.

#### FEATURES

- USB Charging Port.
- LCD Display.
- Short Circuit Protection.
- High and Low Voltage Protection.
- Long Back-up upto 32 Hrs.(Single Lamp); 15 Hrs. (Double Lamp); 8 Hrs. (Double Lamp + Radio)
- Sunlight Sensors Switches ON/OFF Bulbs Automatically
- Mobile Charging Option

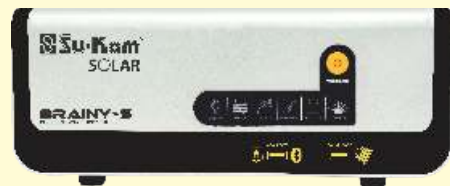


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## Solar UPS

### Brainy S UPS (1P-1P)

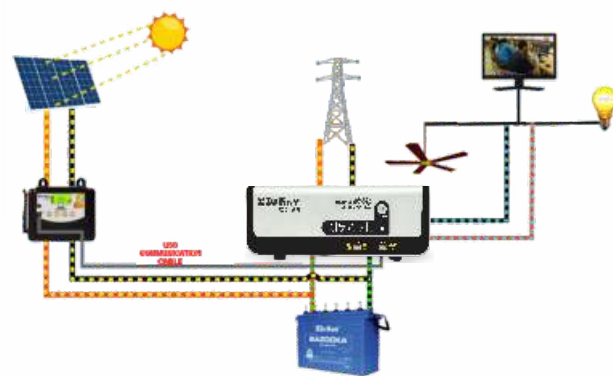


Su-Kam presents the world's first zero change over time BrainyS solar UPS that is the perfect system to run all kinds of sensitive appliances through solar power and mains. When it is connected with Sukam's MPPT or PWM solar charge controller, it can be converted into a smart solar power conditioning unit with charge sharing feature. This brilliant product combines the features of UPS and Solar Power Conditioning Unit to give reliable and steady power to your computers, modems, servers and other sensitive appliances. It can operate on both solar power as well as power from grid, but it always gives priority to solar power.

#### FEATURES

- 20KHz frequency design ensures noiseless operations.
- Built-in Galvanic Isolation transformer for charging circuitry on mains.
- Pure Sinewave UPS with inbuilt battery charger.
- 5th Generation Micro Processor that ensures complete Noiseless Operation and faster processing.
- Smart communication with External Solar Charge Controller via USB port. With your BrainyS you can connect Su-Kam make solar charge controller that will efficiently charge your battery and prolong battery life.
- Intelligent Charge sharing- Helps to greatly reduce electricity bills as well as maintain your battery life. For example if your battery needs 15amps charging current to charge properly and solar is generating 12amps then it will take remaining 3amps from mains to charge your battery.
- BrainyS has been typically designed for optimum performance and maximum protection. BrainyS comes with unique protection features such as overload protection, short circuit protection, mains low cut, mains high cut, PV low cut, PV high cut, battery low protection that prevents battery from going into deep discharge etc.
- 6 Stage battery charging technology helps in increasing the battery life.
- Zero Changeover Time From Mains Mode To Battery Mode- Perfect for running sensitive equipment like computers, printers, High inrush current Industrial Equipment's.
- Standard Model 220V/50Hz (Models on order basis: 110V/60Hz and 220V/60Hz).

#### CONVERT BRAINY-S INTO SOLAR PCU



#Values displayed are for reference only.

## Solar UPS

- Compatible with all kinds of generators especially rural make ones. When generators, especially rural make ones, provide electricity their frequency may range between 42Hz to 65 Hz. In such a scenario UPS usually cut the supply and start running on backup mode. But we have fitted our UPS in such a way that they continue to perform provide hassle free backup.
- Automatic By-Pass System, in case of UPS failure the automatic by-pass system present helps to by-pass electricity to mains so that uninterrupted power supply can be enjoyed by the user.
- High Crest Factor 3:1 enables running of loads that require high starting current, ideal for big appliances that need high starting and low running current

#### Applications\*

Refrigerator, Fan, Tubelight, LED, Television, Washing Machine, Lights, Air Cooler, Water Purifier, IT loads, Water pump, Juicer, Printer, Game Console, Dishwasher, Computer, Laser Printer, CNC Machines.

#### Available Model

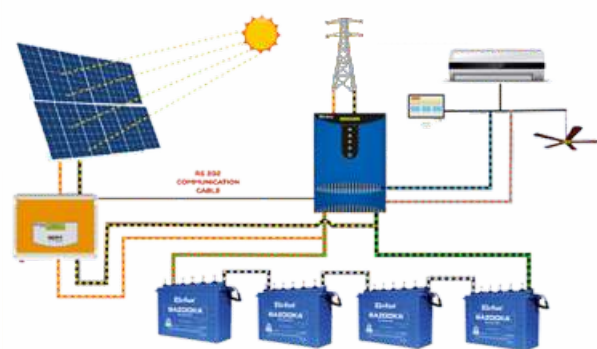
Model	Dimension (LxWxH) in mm	Weight
BrainyS 1100/12V	302x293x132	10.64Kg

\*Depending on Model Capacity



## Solar UPS

### Brainy S UPS (1P-1P)



Su-Kam presents the world's first zero change over time solar UPS that is the perfect system to run all kinds of sensitive appliances through solar power and mains. When it is connected with Sukam's MPPT or PWM solar charge controller, it can be converted into a smart solar power conditioning unit with charge sharing feature. This brilliant product combines the features of UPS and Solar Power Conditioning Unit to give reliable and steady power to your computers, modems, servers and other sensitive appliances. It can operate on both solar power as well as power from grid, but it always gives priority to solar power.

#### FEATURES

1. 20KHz frequency design ensures noiseless operations.
2. Built-in Galvanic Isolation transformer for charging circuitry on mains.
3. Pure Sinewave UPS with inbuilt battery charger.
4. 5th Generation Micro Processor that ensures complete Noiseless Operation and faster processing.
5. Smart communication with External MPPT Solar Charge Controller via RS 232 Communication port- With your BrainyS you can connect Su-Kam solar charge controller that will efficiently charge your battery and prolong battery life. You may also connect other make MPPT Solar Charge Controller with your BrainyS.
6. Intelligent Charge sharing - Helps to greatly reduce electricity bills as well as extend your battery life. For example, if your battery needs 15amps charging current to charge properly and solar is generating 12amps then it will take remaining 3amps from mains to charge your battery.
7. BrainyS has been typically designed for optimum performance and maximum protection. BrainyS comes with unique protection features such as overload protection, short circuit protection, mains low cut, mains high cut, PV low cut, PV high cut, battery low protection that prevents battery from going into deep discharge etc.
8. 6 Stage battery charging technology helps in increasing the battery life.
9. Zero Changeover Time From Mains Mode To Battery Mode- Perfect for running sensitive equipment like computers, printers, High inrush current Industrial Equipment.

#Values displayed are for reference only.

### Brainy S



10. Standard Model 220V/50Hz (Models on order basis: 110V/60Hz and 220V/60Hz).
11. Standard Model 4000/48V & 5.5KVA/96V
12. Compatible with all kinds of generators especially rural make ones. When generators, especially rural make ones, provide electricity their frequency may range between 42Hz to 65 Hz. In such a scenario a UPS usually cuts the supply and starts running on backup mode. But we have fitted our UPS in such a way that they continue to perform and provide hassle free backup.
13. Automatic By-Pass System : in case of UPS failure the automatic by-pass system present helps to by-pass electricity to mains so that uninterrupted power supply can be enjoyed by the user.
14. High Crest Factor 3:1 enables running of loads that require high starting current, ideal for big appliances that need high starting and low running current
15. Compliance to international test standards.
16. BrainyS comes with 4 parameter setting switches- MODE, UP, DOWN, ENTER.
  - MODE- Press once for system parameter settings. Press once again for system running parameters
  - Press up to increase the value of settable system parameter
  - Press down to decrease the value of settable system parameter
  - Press enter to scroll the setting parameters.
17. It can run Inverter AC of 1.5 ton of 3/5 Star Rating

#### Applications\*

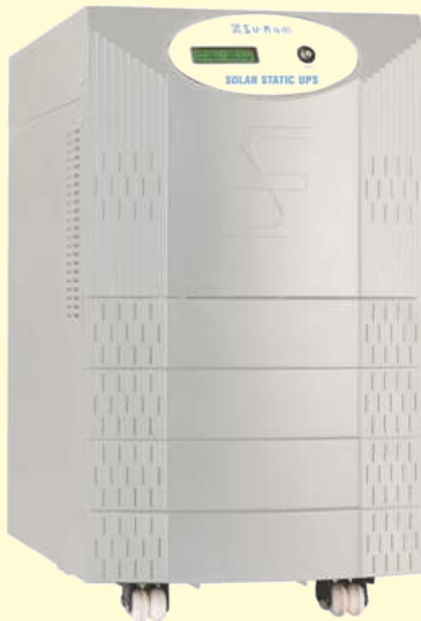
Air Conditioner, Refrigerator, Fan, Television, Washing Machine, Lights, Air Cooler, Water Purifier, IT loads, Water pump, Juicer, Printer, Petrol pump, Game Console, Dishwasher, Computer, Laser Printer, CNC Machines.

MODELS	DIMENSIONS (DxWxH)	WEIGHT
4000/48V BRAINY S	395x245x355	20 KG
5.5KVA/96V BRAINY S	700x455x420	53.5 KG



## Solar Online UPS

### Intelli-Q UPS (IP - IP)



Su-Kam’s Intelli-Q Series Online UPS is an on-line double conversion UPS with a transformer isolated UPS. Intelli-Q has a compact footprint and high quality output to provide the ultimate power protection for critical applications like data processing, telecommunications, industrial processes, security and electro medical systems and can analyze your power quality through power manager solution. The Intelli-Q online UPS not only provides you power backup when you need it, but it also protects the load from disturbances or fluctuations. Because the UPS is already online, the switchover time from mains to UPS in case of a power cut is zero.

#### FEATURES

- Wide Input Voltage & Frequency Window
- Built-in Galvanic Isolation Transformer
- Auto-self Test on LCD Panel
- Fuzzy Logic Controlled battery charging
- Intelligent Battery Management
- Scalable Runtime
- Cold Start
- Easy Source – Intelli-Q technology removes the problems of over-sizing upstream power sources while improving load power factors and current harmonics. The UPS features the latest input current absorption techniques including progressive rectifier start-up and the option to reduce battery-charging currents. These features make Intelli-Q one of the most generator and environmentally friendly UPS available.
- Power Continuity – The Intelli-Q Series Online UPS are designed for ease of installation and maintenance with top entry cable cabinet options and simple but secure access to connection terminals and communications interfaces.
- Flexibility – Intelli-Q Series Online UPS is suitable for a wide range of applications including IT and the most demanding industrial environments. The UPS is suitable for power capacitive loads such as blade servers, without any reduction in active power, from 0.9 leading to 0.8 lagging. With a broad range of accessories and options, complex configurations and system architectures can be achieved to guarantee maximum power availability and the option to add new UPS without interruption to existing users.
- Battery Care System - Traditionally, when a mains supply is present the UPS charges its batteries. Battery power is used for the UPS should the input supply fail. Efficient battery management and care is therefore essential to the overall performance of the UPS in an emergency. The Intelli-Q Battery Care System consists of a range of features designed to provide optimum performance and enhanced operating life.

#### Applications\*

Workstations/Servers, Networking Equipment, Telecom, Color Labs, ATM Machines/POS Systems, Gold Analyser Machines, Security Systems, Textile Industry.

#### Available Models

Model	Dimension (LxWxH) in mm	Weight
5KVA/180V	450x740x715	115Kg
10KVA/180V	450x740x735	133Kg

\*Depending on Model Capacity

## Solar Online UPS

### 3P-3P Solar Online UPS Intelli-Q



Su-Kam’s Intelli-Q Series Online UPS is an on-line double conversion UPS with a transformer isolated UPS. Intelli-Q has a compact footprint and high quality output to provide the ultimate power protection for critical applications like data processing, telecommunications, industrial processes, security and electro medical systems and can analyze your power quality through power manager solution. The Intelli-Q online UPS not only provides you power backup when you need it, but it also protects the load from disturbances or fluctuations. Because the UPS is already online, the switchover time from mains to UPS in case of a power cut is zero.

#### FEATURES

- Wide Input Voltage & Frequency Window
- Built-in Galvanic Isolation Transformer
- Auto-self Test on LCD Panel
- Fuzzy Logic Controlled battery charging
- Intelligent Battery Management
- Scalable Runtime
- Cold Start
- Zero change over time
- Never use Automobiles Batteries with your UPS. They are not suitable for these applications.
- Always use Deep cycle batteries that are best suited for UPS.
- Set the battery charging current from front panel system parameter configuration switch settings.
- In case of frequent power cuts or in winters you may switch to 20A charging selection for fast charging of batteries.
- In Solar priority mode, in case frequent power cut or in winter you can set the battery low cut voltage at high limit to get maximum charging of batteries.
- Always check the water level in batteries (For flooded batteries only).
- Use good quality wires with Input and Output power terminals. Recommended wire rating are:
  - i) Current sharing: Battery charging current feed by Grid + Solar.
  - ii) During charging mode output load current will be feed by Grid.
  - iii) During Inverter mode, output load current will be feed by Battery + Solar.
  - iv) Charger to Inverter transfer by Grid voltage out of range.
  - v) Inverter to Grid transfer by Grid voltage within range.
  - vi) If no solar charger connected or communication with solar charger gets fail, display shows 'PV Communication Fail' message only in charging mode and Grid provide the full charging to battery as per battery mode status.

#### Available Models

Model	Dimension (DxWxH) in mm	Weight
10KVA/360V – Intelliq	450x740x735	110 Kg
20KVA/360V – Intelliq	450x740x735	180 Kg
30KVA/360V – Intelliq	600x780x1000	285Kg
40KVA/360V – Intelliq	600x780x1000	330 Kg
60KVA/360V – Intelliq	755x835x1460	448 Kg



HIGH CAPACITY UPS

6.1



## Brainy-S Solar UPS

### 3P-3P Solar UPS



Su-Kam's Brainy-S Series Online UPS is an on-line double conversion UPS with a transformer isolated UPS. Brainy-S has a compact footprint and high quality output to provide the ultimate power protection for critical applications like data processing, telecommunications, industrial processes, security and electro medical systems and can analyze your power quality through power manager solution. The Intelli-Q online UPS not only provides you power backup when you need it, but it also protects the load from disturbances or fluctuations. Because the UPS is already online, the switchover time from mains to UPS in case of a power cut is zero.

#### FEATURES

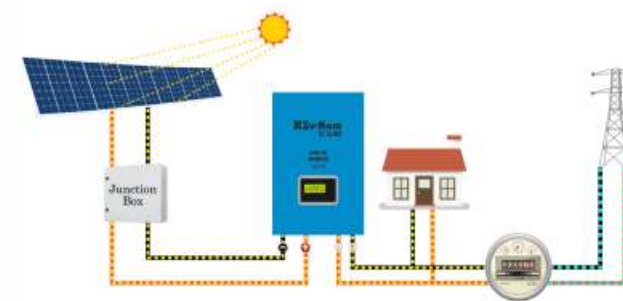
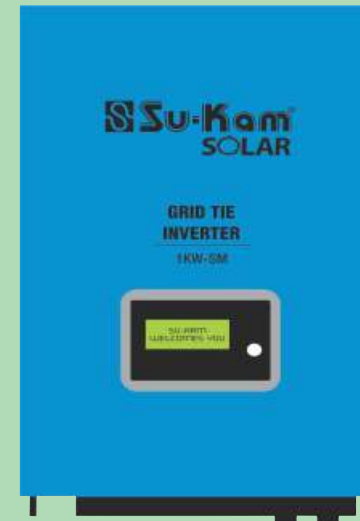
- Wide Input Voltage & Frequency Window
- Built-in Galvanic Isolation Transformer
- Auto-self Test on LCD Panel
- Fuzzy Logic Controlled battery charging
- Intelligent Battery Management
- Scalable Runtime
- Cold Start
- Zero change over time
- Never use Automobiles Batteries with your UPS. They are not suitable for these applications.
- Always use Deep cycle batteries that are best suited for UPS.
- Set the battery charging current from front panel system parameter configuration switch settings.
- In case of frequent power cuts or in winters you may switch to 20A charging selection for fast charging of batteries.
- In Solar priority mode, in case frequent power cut or in winter you can set the battery low cut voltage at high limit to get maximum charging of batteries.
- Always check the water level in batteries (For flooded batteries only).
- Use good quality wires with Input and Output power terminals. Recommended wire rating are:
  - i) Current sharing: Battery charging current feed by Grid + Solar
  - ii) During charging mode output load current will be feed by Grid
  - iii) During Inverter mode, output load current will be feed by Battery + Solar
  - iv) Charger to Inverter transfer by Grid voltage out of range
  - v) Inverter to Grid transfer by Grid voltage within range
  - vi) If no solar charger connected or communication with solar charger gets fail, display shows 'PV Communication Fail' message only in charging mode and Grid provide the full charging to battery as per battery mode status

#### Available Models

Model	Dimension (DxWxH) in mm	Weight
10KVA/360V - Brainy S	450x740x735	110 Kg
20KVA/360V - Brainy S	450x740x735	180 Kg
30KVA/360V - Brainy S	600x780x1000	285Kg
40KVA/360V - Brainy S	600x780x1000	330 Kg
60KVA/360V- Brainy S	755x835x1460	448 Kg
100KVA/360V - Brainy S	800x1035x1560	640Kg

## Solar Power Based Device - Solar Grid Tie Inverter

### Grid Tie



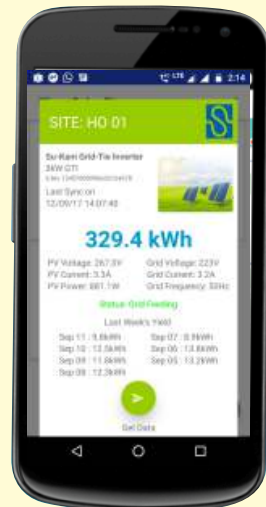
A grid tie UPS is connected to the mains supply of your home which is why it is also called the ON-Grid system. Take advantage of net metering policy in your state by selling solar electricity to Government through grid-tie solar installation at your home or office. Su-Kam's Grid-Tie Solar UPS is designed to generate maximum solar power with efficiency of 98% and work in even most extreme weather conditions.

#### FEATURES

1. 50KHz frequency design ensures noiseless operations.
2. Built-in Galvanic Isolation transformer for charging circuitry on mains.
3. Pure Sinewave UPS with 99.9% MPPT Solar Charge Controller efficiency.
4. Standard Model 220V/50Hz (Models on order basis: 110V/60Hz and 220V/60Hz).
5. LED display panel for easy monitoring and control.
6. Su-Kam's grid-connected solar UPS work on a wide range i.e, 85v-500v for 1kw-5kw UPS and 200v to 850v for 10kw - 20kw UPS. It means that they are able to generate solar power even during periods of low sunshine.
7. High Total Efficiency – High reliability and efficiency with low auxiliary consumption for rapid return on investment. MPPT efficiency > 99.9% ; Maximum efficiency >97.5%. It is able to generate nearly 30% extra solar power.
8. PV compatibility – Su-Kam Grid Tie is designed to take advantage of solar modules configured as high voltage PV string arrays – with an input voltage Maximum Power Point Range of 150 to 550 Vdc.
9. Maximum Power Point Tracking (MPPT) – Su-Kam Grid Tie use Maximum Power Point Technology (MPPT) to harvest the maximum amount of energy from the solar array. Provide single and double MPPT trackers for different application demands.
10. Remote monitoring through RS232 and RS485 communication.
11. Compact state of the art design – Transformer less design. Low space requirement, with fast and easy installation and serviceability for reduced overall cost.



## Solar Power Based Device - Grid Tie Inverter



- Life cycle service & support – rapid support anywhere through Su-Kam's extensive service network.
- Robust enclosure, with IP65 rating – suitable for outdoor installation.
- Compatible with all kinds of generators especially rural make ones. When generators, especially rural make ones provide electricity their frequency may range between 42 to 65 Hz. In such a scenario UPS usually cut the supply and start running on backup mode. But we have fitted our UPS in such a way that they continue to perform provide hassle free backup.
- Armed with protection features – Anti - Islanding, DC reverse polarity protection, Ground fault monitoring, AC short circuit protection, All pole fault current monitoring unit, Environment protection -IP65.
- Innovative plastic body manufactory with high quality industrial plastic that is completely shock proof and can withstand temperature upto 120° C.
- Compliance to international test standards.

**Available Range:**  
SM-1W / SM-1.5W / SM-2KW / SM-3KW  
DM-5KW / DM-10KW / TM-20KW

### Available Models

Models of String Solar Inverter	Dimension (LxWxH) in mm	N.Weight	G.Weight
1KW (1 SM)	630x400x245	13 Kg	15 Kg
1.5KW (1.5 SM)	410x640x250	13 Kg	14.2 Kg
2KW-SM (2 SM)	410x640x255	13 Kg	15 Kg
3KW-SM (3 SM)	410x640x255	16 Kg	18.2 Kg
5KW-DM (5 DM)	470x700x260	24 Kg	25.8 Kg
10KW-DM (10 DM)	800x645x340	40 Kg	44.5 Kg
20KW-TM (20 TM)	800x616x370	39 Kg	46.2 Kg

\*Depending on Model Capacity

## ERD (Emergency Rescue Device) Elevator UPS

### ERD (Emergency Rescue Device) with REMS (Remote Elevator Management System)



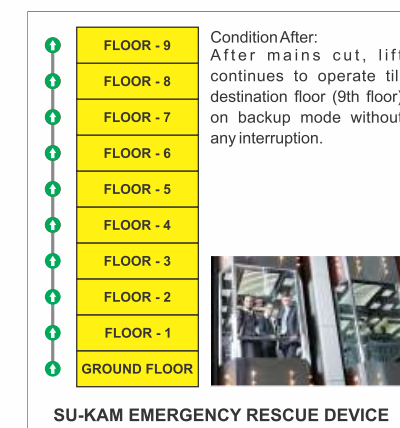
Su-Kam presents the new generation of 3 Phase Emergency Rescue Device (ERD) for a seamless, continuous and jerk free elevator ride even during power failures. It provides emergency backup to the elevator control panel when the mains power fails or drops below an unacceptable level.

### FEATURES

- Automatic Control.
- Keeps the Elevator running non-stop even during power failure.
- Low Investment.
- Low Maintenance.
- Can be monitored through Mobile App.
- Battery Management System.
- Complete Independent Control.
- Compatible with All Elevators .
- Pure Sine Wave Technology.

### HOW DOES IT WORK?

Desired Destination 9th Floor



No .OF PASSENGERS	4	6	8	10	11	12
Recommended ERD Capacity (kVA)	10	10	10	20	20	20
Recommended Battery Capacity (Ah)	26	42	65	65	65	100
Recommended No. Of Batteries	15	15	15	15	15	15

### Available Models

Model	Dimension (LxWxH) in mm	Weight
10KVA/180VDC	450x765x735	106 Kg
20KVA/180VDC	450x765x735	114 Kg



## Solar Charge Controller

### PWM Series



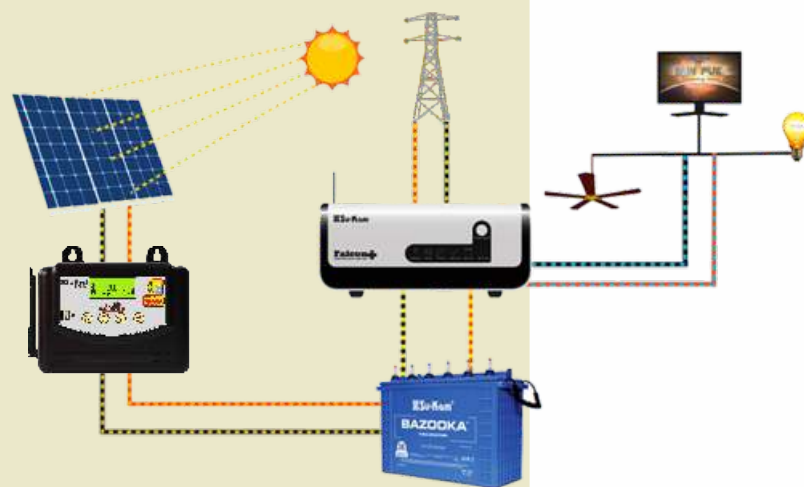
PWM Charge Controller takes input from solar panel but delivers the power partially to the battery.

#### FEATURES

1. Automatic Control.
2. Keeps your Elevator running non-stop even during power failure.
3. Low Investment.
4. Low Maintenance.
5. Can be monitored through Mobile App.
6. Battery Management System upto 30%.
7. Complete Independent Control.
8. Compatible with All Elevators.
9. Pure Sine Wave Technology.

#### Available Models

Model	Dimension (LxWxH) in mm	Weight
12V/20A	134x131x38	0.35 Kg
12V/24V/20A (Solar-Con*)	215x156x68	1.3 Kg
12V/24V/30A LCD	210x79x170	0.56 Kg
36V/48V/60A LCD	207x140x75	1.5 Kg



#Values displayed are for reference only.

## Solar Charge Controller

### MPPT Series



MPPT Charger takes input from the panel and delivers maximum power to the battery. Highlight - 30% increase in power.

#### FEATURES

1. MPPT Charge Controller tracks the maximum power generated by solar panels and transfers the same to the battery with minimal internal losses.
2. The In-built Sensor In MPPT senses the outside temperature and regulates battery charging i.e. over-charging or under-charging by controlling the boost voltage of the battery.
3. MPPT uses DT-6S six stage charging technology for efficient charging and longer battery life.
4. The MPPT Charge Controller enables the customer to automatically switch from one battery system to a double battery system without changing the charge controller.
5. The Advanced Solar Charging Technology in MPPT smartly generates voltage to shake the Battery Electrolyte to ensure efficient charging.
6. The Intelligent Micro Processor in MPPT controls all the internal processes smoothly.
7. The Solar Charge Controlling device in MPPT regulates battery current and provides power voltage high current protection.
8. The Micro Controller and Digital Signaling processing in MPPT charge controller provides overload and short circuit protections.
9. MPPT Solar Charge Controller protects the reverse battery current flow from the battery to solar array at night.
10. The Micro-Controller in MPPT helps protect against reverse polarity of the battery.
11. Micro Controller and Digital Signaling Processing Technology in MPPT saves battery during High Voltage Condition.



#### Available Models

Model	Dimension (LxWxH) in mm	Weight
24V/48V/40A LCD	260x200x125	2.8 Kg
96V/120V/180V*/40A-55A LCD	597x322x200	25 Kg
180V*/240V/360V/40A LCD	597x322x200	23Kg



## Battery Range

### Lead Acid Battery

Models	Warranty (In Months)
Power Bank SID 135	18 + 6
SPG 150	12 + 6

#### KEY FEATURES

- Special additives for better performance.
- 4BS technology that reduces active material shedding resulting in high performance.
- Improved bonding of active material for increased battery life.
- Better curing and cement process resulting in an overall strong and rugged battery.
- High surface area resulting in fast charging.
- Long life cycle.

### Lead Acid Battery



Power Bank SID 135



SPG 150





## Battery Range



Power Supreme SPS 1650



Power Grand TPG 1350



Jumboz JBT 1500



Bazooka HPTN 150 / HPTN 180



Sumo SST 1650



Bazooka Plus HPTP 1500 / HPTP 2000



Warrior++ SBWPP 1500 / SBWPP 1800 / SBWPP 2000

### Tubular Battery

Type	Models	Warranty (In Months)
Short Tubular	Power Supreme SPS 1650	18 + 18
Short Tubular	Power Grand TPG 1350	18 + 18
Short Tubular	Jumboz JBT 1500	24 + 24
Tall Tubular (Low Height)	Bazooka HPTN 150 / HPTN 180	18 + 18
Tall Tubular	Sumo SST 1650	21 + 21
Tall Tubular	Bazooka Plus HPTP 1500 / HPTP 2000	24 + 24
Tall Tubular	Warrior++ SBWPP 1500 / SBWPP 1800 / SBWPP 2000	36 + 12

### KEY FEATURES

- Suitable for long & frequent power cuts.
- Spine thickness : Short & Tall Tubular-2.3mm, Tall Tubular (Low height) & Warrior ++ – 3 mm.
- High surface area resulting in fast charging.
- High quantity of electrolyte that acts as coolant thus keeping the battery cool.
- Does not heat even after frequent charging and discharging of battery.
- Less frequent water topping required.
- Does not heat even after frequent charging and discharging of battery.
- Fast recovery from deep discharge along with high performance.
- Short Tubular : N200 container, Tall Tubular (Low Height) : IT400 Container, Tall Tubular : IT 500 container.
- Long life cycle.

## Battery Range

### Solar Battery

Models	Warranty (In Months)
STB 20 / STB 40 / STB 75 / STBJ 1000 / STBJ 1200 / STB 1200 / STBJ 1500 / STB 2000	18 + 18
STB 1500	24 + 24

### KEY FEATURES

- Designed for holding high electrolyte volume.
- Designed at C10 rating.
- High surface area resulting in fast charging.
- High quantity of electrolyte that acts as coolant thus keeping the battery cool.
- Does not heat even after frequent charging and discharging of battery.
- Perfect for conditions of less charging time and longer discharging time since solar is available for 4 to 5 hours daily.
- Thin battery plates for faster charging.
- Packed with excess active material for extra backup.
- Specially designed for less charging hour and more discharging hours.



STB 20



STB 40



STB 75



STB 1000



STB 1500



All batteries are MNRE Approved.



## Solar PV Module Polycrystalline



Su-Kam Solar Panels are manufactured using latest technology and best quality materials. These solar panels are especially designed to bear extreme weather conditions in India. They have been awarded and certified for being highly efficient, long-lasting and reliable – they are 100% made in India for India and the world. Get ready to make the best investment ever: buy solar panels now and save money on electricity bills for 25 years!

### FEATURES

- Maximum power generation to help you make more solar money.
- Shock-resistant thick iron glass to help you cut down on solar wastage.
- High grade solar cells to give you long-lasting solar panels.
- Best quality raw material to give you best performance even in extreme weather conditions.
- Anodized aluminium frame gives you freedom from maintenance.
- IEC approved Su-Kam’s solar panels are so high in quality that the prestigious International certification body, IEC has certified the solar panels.

Capacity (Wp)		40	50	100	150	250	260	320
Modeule Volt (V)		12	12	12	12	24	24	24
Module Size	Length - L(mm)	665	665	666	666	982	992	992
	Height - H(mm)	435	555	1006	1483	1639	1656	1976
	Width - W(mm)	25	25	35	35	35	35	42
Module Weight (Kgs)		3.10	3.96	7.50	11.20	17.30	17.30	21.80
Cell in series		36	36	36	36	60	60	72
Mounting Hole (X-Axis) (mm)		629	629	630	630	946	956	956
Mounting Hole (Y-Axis) (Distance between two Holes) (mm)		217.5	277.5	503	741.5	819.5	819.5	983

## Solar Street Light



Su-Kam Solar brings to you a revolutionary new product – the SunWay GSM Enabled Solar Street Light with in-built lithium ion battery. This revolutionary new street light can be controlled and monitored via GSM network using an Android based application. The application is available on Google Play Store by the name of GSM Solar LI Streetlight. So, in whichever corner of the world you are, you can communicate to your street light.

### KEY FEATURES

- Pin & plug installation
- Works even in cloudy weather conditions
- In-built Lithium Battery that negates battery theft
- GSM enabled – can be controlled from anywhere in the world
- Motion sensors that automatically adjust brightness
- Quick charging
- Up to 50% more brightness of light
- Great return on investment
- Maintenance free

### APPLICATIONS

The prolific SunWay GSM Enabled Solar Street Lighting System can be installed in housing societies, large and small campuses, villages – even those without grid electricity, perimeters, guesthouses...the possibilities are endless. All weather proof (IP65 approved). Robot design (MNRE approved).

### Available Models

Product Name	Sunway LI1	Sunway LI2	Sunway LI3	Sunway LI4	Sunway LI5	Sunway LI6
Peak Lux	13@3.5m	21@3.5m	31@4m	37@5m	37@6m	37@7m
pole to pole distance	8 to 10m	8 to 10m	8 to 10m	10 to 15m	12 to 18m	14 to 20m
Conventional Light	20W CFL	40W tubelight	2x40W tubelight	70W sodium vapor	150W sodium vapor	100W sodium vapor
Equivalent local LED (W)	7 to 9	12 to 15	18 to 21	36 to 40	45 to 50	60 to 65
No of LED	3	3	3	6	9	12
Dimming	NA	2 stage	3 stage	3 stage	3 stage	3 stage
Motion Sensor	NA	NA	NA	Yes	Yes	Yes
Rating (W)	4	9	15	30	40	50
Battery (WH)	38	77	77	154	154	231
Solar Panel (W)	14	26	40	50	60	75
GSM Option	NA	NA	Yes	Yes	Yes	Yes