# SSU=Kam®

## Falcon PURE SINE WAVE HOME UPS

## Technology for all seasons



Unique ATC sensor keeps the battery charging constant in all temperatures

SSU.Kom

falcon+

CREASES BATTERY /

TECHNOLOGY ADJUSTS BATTERY CHARGING TO CLIMATE CHANGE



First time in India, Su-kam introduces an intelligent technology which comes with a unique ATC (Automatic Temperature Compensation) sensor that automatically adjusts battery charging according to the ambient temperature to maximize battery performance.

## **The SU-KAM Solution**

Automatic Temperature Compensation Technology

- Su-Kam's first Home UPS with ATC Technology senses the outside temperature and accordingly adjusts charging of batteries.
- This new charging system monitors the battery temperature and automatically regulates the voltage.
- This automatic sensing controls over charging and under charging thereby increasing battery life by 30% and providing excellent battery back-up.
- A remote battery temperature sensor (RTS) is attached to one battery in the bank, which determines battery temperature and automatically adjusts the target charge voltages accordingly.
- Since charging efficiency is less than 100%, batteries typically warm up as they are charged. Fluctuations in outside temperature also causes battery temperature to change. ATC technology allows chargers to dynamically adjust target voltages during the charging process as battery temperature changes and ensures optimal charging.



## Current Scenario

Batteries installed in colder regions require higher charge voltage in order to push current into the battery plates and electrolyte. While batteries in hotter regions require a lower charge voltage to eliminate potential damage to valve regulated lead acid (VRLA) cells and reduce unnecessary gassing when flooded cells are used.

Using normal target voltages to charge a battery that is colder than approximately 25°C (77°F) results in an undercharged battery, which delivers lower performance, has a reduced life and a higher life cycle cost.

Applying normal target voltages to a battery that is hotter than 25°C results in an overcharged battery. This condition leads to drying out of VRLA battery cells. With flooded cells, the result will be excessive outgassing, increased battery maintenance in the form of more frequent watering and reduced battery life due to thermal stress.



ATC SENSOR ADJUSTS BATTERY CHARGING ACCORDING TO AMBIENT TEMPERATURE TO MAXIMIZE BATTERY PERFORMANCE



### Highest ever efficiency resulting upto 20% extra battery back-up.

The superior, innovative ACT technology, makes the Falcon Plus an ideal choice as it increases the efficiency of your battery giving upto 20% extra battery back-up and reducing the frequency of water topping required.



## Powerful charging even during very low voltage.

Equipped with an SMPS charger, this intelligent system increases efficiency thereby allowing powerful charging even at a very low voltage of 90V. Thus making it the most effective solution even in remote places where the electricity voltage is not high. In addition user can select the low voltage disconnection (10.5V/11.0V for longer battery life)



## Efficient charging with continual electricity saving.

The inbuilt SMPS charger helps in faster and efficient charging which continuously saves electricity. This efficient charging makes the Falcon Plus compact and light weight.

**Power Saver:** Being 10% more efficient while charging the battery, it draws less current from the mains, hence reducing the electricity bills. In addition, this system is designer for very low "no load power consumption". The customer can save more than 100units of electricity/year.

Low Changeover time: This product has been designed to have a changeover time of less than 8 msec, thus eliminating the rebooting of electronic equipment such as PC, modems, routers, set top boxes etc.

**High voltage protection:** This system can withstand phase to phase voltage as high as 415VC. In such an instance the system will not fail and the appliances connected to the UPS will be saved.

**Generator compatible:** UPS will run trouble free with any kind of DG connected to its input.

**100% protection** against wiring fault, wrong connections, back-feed or short-circuit. In any of these cases the system goes into protection mode safely without fail.

## Applications

Runs heavy-duty residential and commercial appliances.





URBAN RESIDENTIAL





SMALL SHOPS

SME'S

RURAL RESIDENTIAL



FACTORIES

AGRICULTURE

An ideal solution for remote areas

With electricity fluctuations in remote parts of India, the Falcon Plus is the ideal solution to run domestic and agricultural heavy-duty equipment even in very low voltage. While normal inverters need 150V to charge the system adequately, the Falcon Plus charger efficiently at even voltage as low as 90V.



Su-Kam battery recommended for best results

### **PRODUCT FEATURES**

- Pure Sine Wave output runs all your appliances efficiently and noiselessly.
- Intelligent thermal management system.
- Solar Compatibility.
- Manual static by-pass switch.
- Electronic Protection updates.
- Battery reversal pole protection.
- High surge load handling capability.
- Inbuilt wrong wire connection
   protection.
- Smart overload and short circuit protection with 8 times auto retry.
- Reverse current flow protection.

#### Displays

- Multifunction Graphical LED display.
- Power Switch active indication.
- 5 LEDs display following states operation mode, state of charge, fault message.

#### Operation

- Single operation master switch.
- Automatic cooling fan operation.
- Automatic circuit breaker recovery.

#### **Approvals & Certifications**

- Certified by ETDC & CE.
- Technology & Design Patent.
- Copyrights & Trademark.
- Manufactured according to ISO 9001 and ISO 14001.
- R&D approved by Govt. of Science & Technology.



#### LOAD CHART, APPLICATIONS & BACK-UP TIME

	FALCO	N+ 750	/12V	FAL	CON+ 900	)/12V
Load Options	А	В	С	А	В	С
Computer	1	-	-	1	-	-
Television	-	-	1	-	-	1
Tube Lights	3	1	3	3	2	4
Fans	1	2	1	3	3	4
Room Cooler	-	1	-	-	1	-
CFL	-	-	-	1	1	1

Back-up time in hrs. (below back-up time is calculated on above load options A, B, C combination )

135 AH	2.7 H	2.1 H
150 AH	3.0 H	2.4 H
200 AH	4.0 H	3.2 H

\*Recommended battery 100AH-200AH

FALCON+ 1100/12V						
Load Options	А	В	С			
Computer	-	1	-			
Television	-	-	-			
Tube Lights	10	3	4			
Fans	-	4	3			
Room Cooler	-	-	1			
CFL	2	-	-			
Back-up time in hrs. (be	low back-up time is calc	ulated on above load optic	ons A, B, C combination )			
135 AH		1.8 H				
150 AH		2.0 H				
200 AH		2.7 H				
*Recommended batte	ry 100AH–200AH					

 FALCON+ 1600/24V

 Load Options
 A
 B

 Computer
 1

Television	-	-	1			
Tube Lights	7	6	8			
Fans	7	6	8			
Room Cooler	-	1	-			
CFL	-	-	-			
Back-up time in hrs. (below back-up time is calculated on above load options A, B, C combination )						
135 AH		2.1 H				
150 AH		2.3 H				
200 AH		3.1 H				

С

\*Recommended battery 100AH-200AH

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