



SMARTEN®
FUSION IS THE FUTURE

SOLAR
ENERGY

NEVER FEEL POWERLESS



PRODUCT CATALOGUE



 /smartenpowersystems



**PRESENCE OVER
25+ STATES**



Dear Prospective Channel Partner,

Thank you for your interest in Smarten Power Systems Pvt. Ltd. Products. Smarten has been a Solar Solution company since 2014, it specializes in designing and manufacturing high-quality Solar Products. As an authorized dealer, we will consider you to be a valuable part of our long-term success.

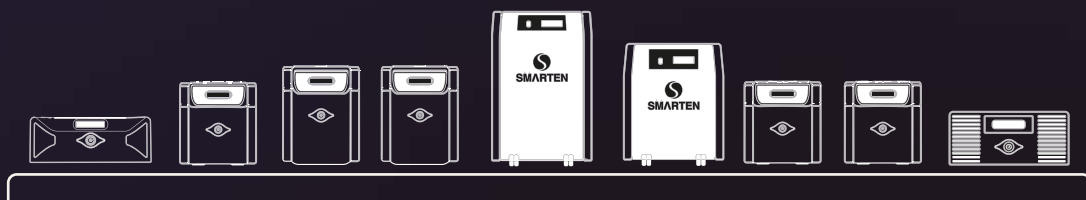
And you will be able to purchase our products at your convenience from our distributors. One of the benefits will be the ability to speak with a qualified representative who would have a thorough knowledge about the complexities of Solar Products. In order to maintain the long-term value of the brand and to promote the product in the best way possible, it is in the best interest of both Smarten and its authorized Distributor.

While there is no initial minimum order, dealer discounts are extended with the understanding that the relationship must be viable and mutually profitable. Therefore, dealer status may be reviewed from time to time, and inactive accounts may be discontinued.

Thank you again for showing interest in becoming an authorized Smarten dealer. If you have any questions, please do not hesitate to contact us.

Sincerely,

RAJNISH SHARMA
(CEO)
Smarten Power Systems Pvt. Ltd.





BRAVO | **HOME UPS** | 300VA - 10 KVA

The technically advanced BRAVO Home UPS operates on mains and supplies output power while charging the battery when Mains supply is available. In case of a power outage, Bravo transfers the entire load to its optimally charged battery and supplies high quality AC power.

Apart from the highest quality components and engineering, what makes Bravo special is the inbuilt stabilizer and charger. With Bravo there is no need to purchase an additional voltage stabilizer, or a charger for charge recovery in case the battery is exhausted. That's why it is becoming the most popular sine-wave UPS in the market.



**15 Ampere
Current For Faster
Battery Charging**



**Smart Charging
even during Low
Voltage 90V***



**Complete Protection
From Back Feed And
Phase To Phase
Supply.**



**Compatible
with all Type
Battery**



LED BULB



TULLU PUMP



JUICER MIXER



PC



LED TV



REFRIGERATOR



SUBMERSIBLE PUMP



DENTAL CHAIR



PHOTOCOPIER



WASHING MACHINE

PRODUCT SPECIFICATIONS

MODEL NAME	900VA	1050VA	1100VA	2000VA	3500VA	5250VA	5250VA	6000VA	7500VA	10000VA
MAINS MODE										
Mains AC Input range (UPS mode)	175VAC-265VAC ± 10VAC									
Mains AC low cut recovery UPS mode	185VAC ± 10VAC									
Mains AC high cut recovery UPS mode	255VAC ± 10VAC									
Mains AC Input range (WUPS mode)	90VAC-295VAC ± 10VAC									
Mains AC low cut recovery WUPS mode	110VAC ± 10VAC									
Mains AC high cut recovery WUPS mode	285VAC ± 10VAC									
Input Frequency Range	40Hz to 60Hz									
Battery										
DC input voltage	12V			24V	48V		96V	72V	96V	120V
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)									
Charging Current 100Ah-135Ah Setting (I/P range 135VAC to 295VAC)	12A ± 1A									
Charging Current 150Ah-220Ah Setting (I/P range 135VAC to 295VAC)	15A ± 1A									
Backup Mode										
Output voltage / Frequency	220VAC +5% -10% (until battery low alarm) / 50Hz ± 0.2 Hz									
Output waveform	Pure Sine Wave									
Low Battery Cut	10.4V ± 0.2V			21.6V ± 0.2V	43.2V ± 0.4V		86.4V ± 0.4V	64.8V ± 0.4V	86.4V ± 0.4V	108V ± 0.4V
Change over time UPS /WUPS mode	< 10msec / < 25msec						< 4msec / < 25msec			
Protections										
Overload /Short Ckt./Backfeed in backup mode	Available									
Over tempature/ Reverse Battery	Available									
Phase to Phase protection in mains mode	Available									
Display and Alarms										
LED Status Display	Mains ON, Input -Voltage/ Frequency, Battery -Voltage/Charging/Charged, UPS ON-OFF, Load, Output Voltage etc and all fault messages									
Buzzer	Audible beep for all protections									
Weight and Dimensions										
Dimensions in mm	270x190x125			340x230x260	350x230x310		530x360x585		550x410x650	
Weight	9.0kg	9.35kg	9.5kg	15.9kg	21.4kg	26.3kg	43kg	51kg	73kg	78kg

LOAD CHART*

PRODUCTS	900VA		1050VA		1100VA		2000VA		3500VA		5250VA		5250VA		6000VA		7.5 KVA		10 KVA	
OPTIONS	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
21" TV/29" TV*	-	1	-	1	-	1	2	1	2	-	4	2	4	2	2	1	4	3	2	2
Fan	3	4	3	4	4	3	8	10	4	4	15	10	15	10	10	6	15	5	20	4
Tube Light	3	4	3	4	4	3	8	10	4	8	15	10	15	10	10	5	15	10	20	15
11W CFL	3	6	3	6	5	5	10	16	4	4	15	20	15	20	20	10	15	10	20	15
0.8 Ton AC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-
Computer	1	-	1	-	1	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
Air Cooler	-	-	-	-	-	-	-	-	-	1	-	2	-	2	1	-	2	2	4	4
Refrigerator 360 ltr	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-
1 Ton AC	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	2	-	-	-	-
1.5 Ton AC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2

*Conditions apply


SAVER
 SOLAR HYBRID POWER CONDITIONING UNIT

SOLAR PCU
700VA - 10 KVA

The name says it all. Powered by Smarten's high quality solar panels, the SAVER solar PCU provides power saving up to 30%. Saver is new generation Hybrid Power Conditioning Unit which accepts dual Inputs i.e Grid power as well as Solar Power at same time while giving priority to solar power hence helps in bringing down the electricity bill. Moreover, Dual inputs helps to protect ourselves from extended power cuts. System can also work as a normal UPS in case solar panels are not connected with system.

 BATT VOLT 21.6V
 AC LOAD 26%

Big LCD
 Screen for all
 Notification

Smart Solar
 Optimization
 Usage Settings

Recover Deep
 Discharge Battery
 Even Zero Volt Gravity

In built 50 Amp*
 strong Solar
 charge controller.

LED BULB

TULLU PUMP

JUICER MIXER

LAPTOP

LED TV

REFRIGERATOR

SUBMERSIBLE PUMP

DENTAL CHAIR

PHOTOCOPIER

WASHING MACHINE

PRODUCT SPECIFICATIONS											
MODEL NAME	700VA	1000VA	1100VA	2000VA	2500VA	3500VA	5250VA	5250VA	6000VA	7500VA	10000VA
MAINS MODE											
Mains AC Input range (UPS mode)	175VAC-265VAC ± 10V										
Mains AC low cut recovery UPS mode	185VAC ± 10VAC										
Mains AC high cut recovery UPS mode	255VAC ± 10VAC										
Mains AC Input range (WUPS mode)	90VAC-295VAC ± 10V										
Mains AC low cut recovery WUPS mode	110VAC ± 10VAC										
Mains AC high cut recovery WUPS mode	285VAC ± 10VAC										
Input Frequency Range	40Hz to 60Hz										
Battery											
DC input voltage	12V			24V		48V		96V	72V	96V	120V
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)										
Charging Current 100Ah-135Ah Settting (I/P range 135VAC to 295VAC)	12A ± 1A										
Charging Current 150Ah-220Ah Setting (I/P range 135VAC to 295VAC)	15A ± 1A										
Backup Mode											
Output voltage / Frequency	220VAC +5% -10% (until battery low alarm) / 50Hz ± 0.2 Hz										
Output waveform	Pure Sine Wave										
Low Battery Cut	10.4V±0.2V			21.6V±0.2V		43.2V±0.4V		86.4V±0.4V	64.8V±0.4V	86.4V±0.4V	108V±0.4V
Change over time UPS /WUPS mode	< 10msec / < 25msec							< 4msec / < 25msec			
Protections											
Overload /Short Ckt./Backfeed in backup mode	Available										
Over tempature/ Reverse Battery	Available										
Phase to Phase protection in mains mode	Yes provided by electronic										
Solar Charge Controller											
Solar Charge Controller type	PWM type										
Maxi Panel wattage can be connected	500W	600W		1500W	1800W	3000W		6500W	4500W	6500W	8000W
Maxi PV current	30A			50A							
Reverse PV protection /current flow to PV	Available										
Sharing of current when PV and Grid Both are available	If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV and grid.										
Option for Grid and Battery priority	Available, Customer friendly settings										
Display and Alarms											
LCD Status Display	Mains ON, Input -Voltage/Frequency, Battery -Voltage/Charging/Charged, Charging Current, PV Voltage/current Backup Mode, UPS- ON/OFF, Load %, Output -Voltage/ Frequency and all protections etc.,										
Weight and Dimensions											
Dimensions in mm	270x190x125			340x230x260		350x230x310		530x360x585		550x410x650	
Weight	8.5kg	9.35kg	9.5kg	15.9kg	18.3kg	25 Kg	27.5 Kg	43kg	51kg	73kg	78kg

LOAD CHART*			
S. No	Model	Load on Solar	Solar Panel Capacity
1.	700/12V	2 Fan + 4 CFL + 1 TV	Upto 500 W
2.	1000/12V	4 Fan + 8 CFL + 1 TV or 2 Fan + 4 CFL + 1 Refrigerator	Upto 600 W
3.	1100/12V	5 Fan + 10 CFL + 1 TV or 3 Fan + 6 CFL + 1 Refrigerator + 1 TV	Upto 600 W
4.	2000/24V	12 Fan + 10 CFL + 1 TV or Water Pump 1 HP + 3 Fan + 6 CFL + 1 Refrigerator + 1 TV	Upto 1500 W
5.	2500/24V	14 Fan + 15 CFL + 1 TV or Submersible Pump 1 HP + 4 Fan + 5 CFL or 3 Fan + 6 CFL + 1 TV	Upto 1800 W
6.	3500/48V	10 Fan + 20 CFL + 1 TV or Submersible Pump 1 HP + 6 Fan + 10 CFL or 5 Fan + 8 CFL + 1 TV or 1 Petrol Pump Nosel	Upto 3000 W
7.	5250/48V	25 Fan + 25 CFL + 1 TV or Submersible Pump 2 HP + 6 Fan + 15 CFL or 8 Fan + 8 CFL + 1 AC 1 Ton + 1 TV or 2 Petrol Pump Nosel + 6 CFL	Upto 3000 W
8.	5250/96V	25 Fan + 25 CFL + 1 TV or Submersible Pump 2 HP + 6 Fan + 15 CFL or 8 Fan + 8 CFL + 1 AC 1 Ton + 1 TV or 2 Petrol Pump Nosel + 6 CFL	Upto 6500 W
9.	6000/72V	25 Fan + 25 CFL + 1 TV or Submersible Pump 2 HP + 6 Fan + 15 CFL or 8 Fan + 8 CFL + 1 AC 1.5 Ton + 1 TV or 2 Petrol Pump Nosel + 6 CFL	Upto 4500 W
10.	7500/96V	5 Fan + 10 CFL + 10 LED Bulb 7W + 2 Room Cooler + 3 TV 32" + 2 AC 1.5 Ton	Upto 6500 W
11.	10000/120V	35 Fan + 36 CFL + 3 TV or Submersible Pump 2 HP + 10 Fan + 25 CFL or 10 Fan + 10 CFL + 2 AC 1.5 Ton + 1 TV or 4 Petrol Pump Nosel + 10 CFL	Upto 8000 W

*Conditions apply



Superb
MPPT SOLAR POWER CONDITIONING UNIT

MPPT BASED PCU | 1100VA-15KVA

Superb MPPT based Solar PCU is a magnificent product of SMARTEN fitted with premium quality components and technically advanced processor. The meaning of MPPT is “Maximum Power Point Tracking.” Superb is an innovative Solar Hybrid inverter that gives you the joy of uninterrupted power supply backed by smarten’s impeccable solar panels.

It’s advanced technology makes it 30% extra efficient than normal PCU’s It is power packed with exciting features like LCD screen, advanced DSP controller, 4 levels of DOD levels, 10 ms change over time, independent battery Charger, inbuilt UPS system etc which makes it a another jewel of Smarten’s product port folio.



**MPPT BASED ADVANCE
TECHNOLOGY PCU**



**30% MORE
EFFICIENT**



**SMART CHARGING
EVEN DURING LOW
VOLTAGE 90V***



**GRID CHARGING ENABLE
/DISABLE OPTION FOR
REDUCED ELECTRICITY
BILL**



LED BULB



TULLU PUMP



JUICER MIXER



LAPTOP



LED TV



REFRIGERATOR



SUBMERSIBLE PUMP



FAN



TUBE LIGHT



PETROL PUMP NOZZLE

PRODUCT SPECIFICATIONS

MODEL NAME	1100VA/12V	2500VA/24V	4000VA/48V	5.2 KVA/48V	7.5 KVA/96V	10 KVA/120V	15 KVA/240V
Mains Input mode							
Mains Input AC Range UPS mode	175VAC - 265VAC ± 10VAC						
Mains Input AC Range WUPS mode	90VAC - 295VAC ± 10VAC						
Input Frequency Range	40Hz to 60Hz						
Battery							
Boost charging voltage for LA Battery	14V ± 0.2V	28V ± 0.2V	56V ± 0.2V		112V ± 0.4V	140V ± 0.4V	280V ± 0.4V
Boost charging voltage for Tubular and SMF Battery	14.5V ± 0.2V	29V ± 0.2V	58V ± 0.2V		116V ± 0.4V	145V ± 0.4V	290V ± 0.4V
Charging Current By Grid	15A + 3A						5A - 15A + 3A
Grid Charging Enable/Disable option	Yes						
Backup Mode							
Output voltage	220VAC + 5% -10% (until battery low alarm)						
Output frequency	50Hz ± 0.2 Hz						
Low Battery Cut	10.6V ± 0.2V	20.8V ± 0.2V	42.4V ± 0.4V		83.2V ± 0.4V	104V ± 0.4V	210V ± 0.4V
Protections							
Overload in backup mode					Available		
Short Circuit in Backup Mode					Available		
Short Circuit in Mains Mode					Available		
Reverse Battery					Available		
Solar Charge Controller							
Solar Charge Controller type	MPPT						
Maxi Panel wattage can be connected	500 WATT	1800 WATT	3000 WATT		6500 WATT	8000 WATT	15000 WATT
Maximum PV Voltage	50V	90V	135V		250V	350V	600V
Maximum Battery current	30 Amp.	50 Amp.					60 Amp.
Efficiency	> 93%						
Reverse PV protection /current flow to PV	Available						
Sharing of current when PV and Grid Both are available	If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV and grid.						
DOD definition(Depth of Discharge)	Mains will be connect when battery voltage reach at defined value of the battery voltage.						
DOD (Depth of Discharge)	20%- if batt. volt. is 12.5V	20%- if batt. volt. is 25.0V	20%- if batt. volt. is 50.0V		20%- if batt. volt. is 100V ± 0.2V	20%- if batt. volt. is 125V ± 0.2V	Grid Reconnect Can set 214V To 250V (10.7V To 12.5 per battery)
	30%- if batt. volt. is 12.0V	30%- if batt. volt. is 24.0V	30%- if batt. volt. is 48.0V		30%- if batt. volt. is 96V ± 0.2V	30%- if batt. volt. is 120V ± 0.2V	
	40%- if batt. volt. is 11.5V	40%- if batt. volt. is 23.0V	40%- if batt. volt. is 46.0V		40%- if batt. volt. is 92V ± 0.2V	40%- if batt. volt. is 115V ± 0.2V	
	50%- if batt. volt. is 11.0V	50%- if batt. volt. is 22.0V	50%- if batt. volt. is 44.0V		50%- if batt. volt. is 88V ± 0.2V	50%- if batt. volt. is 110V ± 0.2V	
Display and Alarms							
LCD Fault / Protection Status Display	Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed						
Buzzer	Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed						

LOAD CHART*

Model	Load on Solar	Solar Panel Capacity
1100VA	8 Fan + 10 CFL + 1 TV or 3 Fan + 6 CFL + 1 Refrigerator + 1 TV	Upto 500 W
2500VA	14 Fan + 15 CFL + 1 TV or Submersible Pump 1 HP + 4 Fan + 5 CFL or 3 Fan+6 CFL+1 TV	Upto 1800 W
4 KVA	10 Fan + 20 CFL + 1 TV or Submersible Pump 1 HP + 6 Fan + 10 CFL or 5 Fan + 8 CFL + 1 TV or 1 Petrol Pump Nozzle	Upto 3000 W
5.2 KVA	25 Fan + 25 CFL + 1 TV or Submersible Pump 2 HP + 6 Fan + 15 CFL or 8 Fan + 8 CFL + 1 AC 1 Ton + 1 TV or 2 Petrol Pump Nozzle	Upto 3000 W
7.5 KVA	5 Fan + 10 CFL + 10 LED Bulb 7W+ 2 Room Cooler+ 3 TV 32" + 2 AC 1.5 Ton	Upto 6500 W
10 KVA	35 Fan + 36 CFL + 3 TV or Submersible Pump 2 HP + 10 Fan + 25 CFL or 10 Fan + 10 CFL + 2 AC 1.5 Ton + 1 TV or 4 Petrol Pump Nosel + 10 CFL	Upto 8000 W
15 KVA	60 Fan + 15 Computer + 60 CFL + 50 CCTV OR 3 HP Submersible + 20 Fan + 50 CFL or 20 Fan + 10 CFL + 3 AC 1.5 Ton + 5 TV or 20 CCTV + 5 TV + 5 Petrol Pump Nozzle + 50 CFL	Upto 15000 W

*Conditions apply


BOOM
**SOLAR PCU
WITH LED**
700VA - 2000VA

The economical yet technically advanced Boom Solar PCU with technology from Germany and Taiwan combines the functions of a solar inverter and UPS, and completely cancels the need to maintain separate power backup systems for powering equipment and computers.

With a 10ms changeover time, triple protection and high efficiency, Boom helps you to enjoy continuous power even during extended power cuts and make you lesser dependent on the power grid.


**SMART SOLAR
OPTIMIZATION
USER SETTING**

**EXTREMELY
ECONOMICAL**

**SOLAR PANEL
CAPACITY UPTO
300W TO 2000W**

**USER FRIENDLY
LED DISPLAY**

LED BULB

TULLU PUMP

PC

LED TV

REFRIGERATOR

SUBMERSIBLE PUMP

FAN

CFL 15W

PRODUCT SPECIFICATIONS				
MODEL NAME	700VA/12V	900VA/12V	1100VA/12V	2000VA/24V
MAINS MODE				
Mains AC Input range (UPS mode)	175VAC-265VAC ± 10VAC			
Mains AC low cut recovery UPS mode	185VAC ± 10VAC			
Mains AC high cut recovery UPS mode	255VAC ± 10VAC			
Mains AC Input range (WUPS mode)	90VAC-295VAC ± 10VAC			
Mains AC low cut recovery WUPS mode	110VAC ± 10VAC			
Mains AC high cut recovery WUPS mode	285VAC ± 10VAC			
Input Frequency Range	40Hz to 60Hz			
Battery				
DC input voltage	12V			24V
Float Charging Voltage	13.7V ± 0.2V			27.4V ± 0.2V
Bulk absorption Voltage	14.8V ± 0.2V			29.6V ± 0.2V
Boost charging Voltage for LA Battery	14.0V ± 0.2V			28.0V ± 0.3V
Boost charging Voltage for TUB/SMF	14.5V ± 0.2V			28.8V ± 0.3V
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)			
Charging Current at Grid/Battery Priority	15A ± 3A			
Backup Mode				
Output voltage	220 VAC ± 10%			
Output Frequency	50Hz ± 0.2 Hz			
Output waveform	Pure Sine Wave ≤ 5%THD			
Low Battery Warning	10.8 ± 0.2V			21.6V ± 0.2V
Low Battery Cut	10.4 ± 0.2V			20.8V ± 0.2V
Change over time UPS /WUPS mode	< 10msec / < 25msec			
Protections				
Overload in Backup mode	Yes provided, system will indicate on display at 101% load			
Short Circuit in Backup mode	System will shutdown after 3 - retries in case of output short circuit			
Short Circuit in Mains mode	Mains Fuse will blown			Mains MCB will trip
Back Feed	System will shutdown in case of back feed and there is no retry			
Over temperature	Yes provided, if heat sink temperature goes above 100°C System will shut down			
Reverse Battery	DC fuse will blown			
Phase to Phase protection in mains mode	Yes provided by electronic			
Solar Charge Controller				
Solar Charge Controller type	PWM type			
Maxi Panel wattage can be connected	600W			1500W
Maxi PV current	25A			50A
Reverse PV protection /current flow to PV	Available			
Sharing of current when PV and Grid Both are available	If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV and grid.			
Option for Grid and Battery priority	Yes, provided user can set priority for Battery or Grid Hence user set system in electricity bill saving			
Display and Alarms				
LCD Status Display	Mains ON, Input -Voltage/Frequency, Battery -Voltage/Charging/Charged, Charging Current, PV Voltage/current Backup Mode, UPS- ON/OFF, Load %, Output -Voltage/ Frequency and all protections etc.,			
Weight and Dimensions				
Dimensions in mm	301x297x160	355x355x190		425x315x335
Weight	8.2 Kg	8.5 Kg	9.5 Kg	16 Kg

LOAD CHART*

PRODUCTS	700VA		900VA		1100VA		2000VA	
OPTIONS	A	B	A	B	A	B	A	B
LED TV 32"	-	1	-	1	-	1	-	2
CFL 15W	4	2	5	4	6	6	3	4
Computer	1	-	1	-	1	-	-	-
Fan	1	2	3	4	4	2	2	3
LED Bulb 7W	3	4	5	5	6	7	3	5
Refrigerator 165 Ltr.	-	-	-	-	-	-	-	1
Water Pump 1HP	-	-	-	-	-	-	1	-

*Conditions apply


BRAVO
 TUBULAR BATTERY

**TUBULAR
BATTERY**
100 Ah - 220 Ah

Under the supervision of Smarten's quality experts, Bravo battery is manufactured using cutting-edge technology and premium grade raw materials at our in-house well-equipped manufacturing unit.

It is made with LSP Technology to handle high surge current of loads. The offered battery is a programmable battery. Hence, it can be used in a wide variety of applications.


LOW SELF DISCHARGE

LONG CYCLE LIFE.

**SUPERIOR HIGH RATE
DISCHARGE FEATURE.**

**LEVEL INDICATOR FOR
EASY MAINTENANCE**

S. No.	Model	Volts	Capacity @C20	Capacity @C10	Initial Charging Current (Amps)	Dimensions (H x W x L) mm
1.	BRFT 1600	12	160 AH	150 AH	15A	525 x 280 x 320
2.	BRFT 2200	12	200 AH	170 AH	15A	503 x 193 x 412


SAVER
 TUBULAR BATTERY

**TUBULAR
BATTERY**
100 Ah - 220 Ah

Made with Hi-Power Selenium technology which makes it almost self-sustainable battery (Low maintenance) and more durable (Low self-discharge current). All of smarten's batteries are solar panel compatible.

It protects you from the suffering of buying a new battery whenever you wish to switch to solar. Saver is a programmable battery. Hence, it can be used in a wide variety of applications.


LOW SELF DISCHARGE

LONG CYCLE LIFE.

**SUPERIOR HIGH RATE
DISCHARGE FEATURE.**

**LEVEL INDICATOR FOR
EASY MAINTENANCE**

S. No.	Model	Volts	Capacity @C20	Capacity @C10	Initial Charging Current (Amps)	Dimensions (H x W x L) mm
1.	SRTT 1700	12	170 AH	150 AH	15A	503 x 193 x 412
2.	SRTT 2000	12	200 AH	170 AH	15A	503 x 193 x 412
3.	SRTT 2200	12	220 AH	170 AH	15A	503 x 193 x 412


BOOM
 TUBULAR BATTERY

TUBULAR BATTERY | 180 Ah

Made with Hi-Power Selenium technology which makes it almost self-sustainable battery (Low maintenance) and more durable (Low self-discharge current). All of smarten's batteries are solar panel compatible.

It protects you from the suffering of buying a new battery whenever you wish to switch to solar. Saver is a programmable battery. Hence, it can be used in a wide variety of applications.


LOW SELF DISCHARGE

LONG CYCLE LIFE.

**SUPERIOR HIGH RATE
DISCHARGE FEATURE.**

**LEVEL INDICATOR FOR
EASY MAINTENANCE**

S. No.	Model	Volts	Capacity @C20	Capacity @C10	Initial Charging Current (Amps)	Dimensions (H x W x L) mm
1.	SRTT 1800	12	180 AH	150 AH	15A	503 x 193 x 412

PRIME+

SOLAR CHARGE CONTROLLER

MPPT BASED
 12V-24V/30 Amp
 24V-48V/50 Amp

Prime+ is MPPT based solar charge controller which is an efficient current regulator that prevents your batteries from deep discharging. It performs controlled discharges, depending on the battery. It also saves 30% more power than other charge controllers it comes with a friendly user interface which makes it easy to control.



Wall Mounting option



User Friendly Display



Smart Auto detect Battery Functions



Compatible with all Type Battery

DISPLAY MESSAGES

Welcome To
Smarten World

Website
www.smartenpowersystems.com

Prime MPPT SCC
12V/30 Amp

Reverse PV
Connected

Solar PV Current
10 Amp

Mains Available
200 V

Batt Volt 12.2V

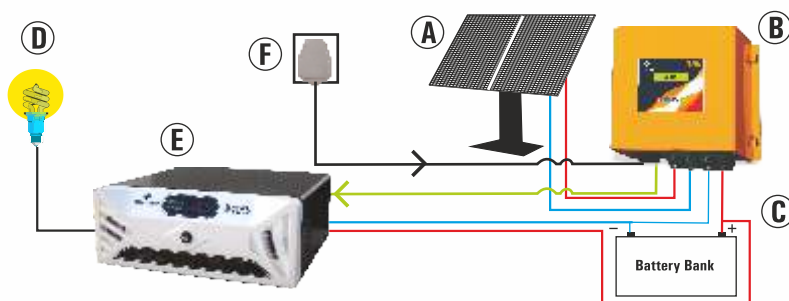
Saving Unit
010

Batt Type Switch
Lead Acid / Tubular Battery

Solar Power
Available/ Not Available

PV Voltage

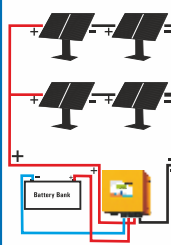
BLOCK DIAGRAM OF PRIME+ MPPT SOLAR PCU KIT



A. Solar Module B. MPPT Prime+ C. Battery Bank D. Load E. Home UPS F. Mains

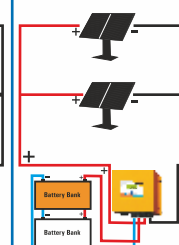
FOR 12V SYSTEM

150W Solar Panel
will connect in
below series



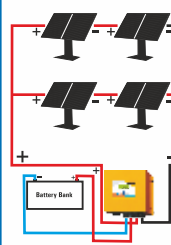
FOR 24V SYSTEM

250W Solar Panel
will connect in
below series



FOR 24V SYSTEM

250W Solar Panel
will connect in
below series



SAVIOUR
**SOLAR CHARGE
CONTROLLER**
PWM BASED
12V/25 Amp
120V/50 Amp

It's truly a savior. It saves people from the worries of buying a separate solar inverter when they're willing to switch to solar. All you have to do is install Smarten's top quality Panels, and connect them to your existing UPS via the Smarten Saviour.

Smarten Savoir charge controller is a voltage and current regulator that prevents your batteries from deep discharging. It also protect your solar panels.


**Wall Mounting
option**

**User Friendly
Display**

**Smart Auto detect
Battery Functions**

**Compatible
with all Type
Battery**
TECHNICAL SPECIFICATION

	12V	12V	24V	48V	72V	96V	120V
Battery Type	LA/Tubular/SMF						
Technology	Digital Processor Based High Efficiency Design						
Max. PV Current Rating	25 AMP	50 AMP					
Max. PV Voltage Rating	25V	25V	55V	90V	132V	265V	265V
Max. Panel Install	500 Watt	1000 Watt	1500 Watt	3000 Watt	4500 Watt	6500 Watt	8500 Watt
Float Charging Voltage	13.7V±0.2V	13.7V±0.2V	27.4V±0.2V	54.8V±0.2V	82.2V±0.2V	109.6V±0.2V	137V±0.2V
Boost Charging Voltage For Tubular And SMF Battery	14.5V±0.2V	14.5V±0.2V	29V±0.2V	58V±0.2V	87V±0.2V	116V±0.2V	145V±0.2V
Boost Charging Voltage For LA Battery	14V±0.2V	14V±0.2V	28V±0.2V	56V±0.2V	84V±0.2V	112V±0.2V	140V±0.2V
Bulk/Absorption Voltage	14.8V±0.2V	14.8V±0.2V	29.6V±0.2V	59.2V±0.2V	88.8V±0.2V	118.4V±0.2V	148V±0.2V
Solar Charge Controller To PV Power Connection Time	<15 Sec.						
Peak Efficiency	>90%						
SCC Type	PWM (Pulse With Modulation)						
PROTECTIONS							
Reverse PV Protection	Provided						
Reverse Current Flow to PV	Provided						
High PV Voltage	Provided						
Over Temperature	Provided (If heat sink temperature goes above 100°C, system will shut down)						
DISPLAY PARAMETERS							
Display Type	LCD Display						
Display Messages	Welcome, Smarten Website Address, System Capacity						
SCC Fault/Protection Status	Reverse PV/DC Load Overload/High PV voltage / High Temp.						
ENVIRONMENT							
Operating Temperature	0°C To 40°C						
Storage Temperature	0°C To 50°C						
Operating Relative Humidity	90% Non-Condensing						


SOLAR
 MONOCRYSTALLINE

40W - 380W

With the highest quality materials and based on the latest solar technology from Germany and Taiwan, Smarten SOLAR PANELS are completely immune to India's extreme heat, cold, dust and heavy rainfall. Whatever the weather, these panels are crafted to serve you reliably for 25 years or more.

Authentic, durable, with the highest efficiency of solar cells, Smarten Solar Panels offer the best performance in cloudy weather, and don't even get damaged in winds of 120 km/hr.

Smarten SOLAR PANELS help you cut down your electricity bills and also friendly to the environment. We urge you to invest in this very best of investments, both for yourself and your planet.

Technical Specifications

Wattage Wp	40W	50W	60W	75W	100W	150W	160W	190W**	260W	265W	320W	380W**
Voltage at max. Power, Vmax	17.00	18.00	18.00	18.00	18.00	18.20	18.20	20.4	30.92	30.92	38.12	39.92
Open circuit Voltage, Voc	21.00	21.00	21.00	22.00	22.00	22.20	22.20	24.3	37.95	37.95	45.15	49.20
current at max. Power, Imax	2.36	2.78	3.33	4.17	5.56	8.30	8.30	9.3	8.58	8.58	8.39	9.53
short circuit current, Isc	2.54	3.20	3.83	4.67	6.06	8.50	8.50	9.86	9.18	9.18	8.98	9.9
FF	0.75	0.74	0.75	0.73	0.75	0.80	0.80	0.80	0.76	0.76	0.75	0.75
Note: *STC(1000W/AM1.5/cell temperature 25°C)												
Module Mechanical Details												
Module Length (mm) ±2mm	470	545	645	775	1010	1490	1490	1490	1645	1645	1963	1963
Module width (mm) ±2mm	665	665	665	665	665	665	665	665	985	985	985	985
Module efficiency (%)	13.99	13.80	13.99	14.55	14.89	15.14	15.14	16.35	16.35	16.35	16.55	19.58
Mounting hole Pitch X axis in mm ±2mm	637	637	637	637	637	630	630	630	945	945	945	945
Mounting hole Pitch Y axis in mm ±2mm	210	300	300	400	500	750	750	750	860/1360	860/1360	1175/1400	1175/1400
Module weight (Aprox in kg)	3	4	5	6.5	7.75	10.6	10.6	10.6	17.5	17.5	22	22.5
Packing Type	5 in 1	5 in 1	5 in 1	5 in 1	5 in 1	4 in 1	4 in 1	4 in 1	1 in 1	1 in 1	1 in 1	1 in 1
Power Tolerance -0/+3%, Electrical Parameters Tolerance +5%												

*Conditions apply ** These are Monocrystalline Panel.



Superb
MPPT SOLAR & POWER CONDITIONING UNIT

BRAVO
PURE SINE WAVE HOME UPS

SAVER
SOLAR HYBRID POWER CONDITIONING UNIT

Smarten High Capacity range with smart **BRAVO HOME UPS**, **SAVER POWER CONDITIONING UNIT** and **SUPERB MPPT POWER CONDITIONING UNIT**. Run your business and valuable appliances with Smarten high Capacity range..



REFRIGERATOR



SUBMERSIBLE PUMP



DENTAL CHAIR



PHOTOCOPIER



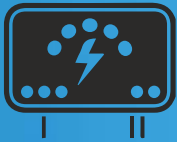
PETROL PUMP NOZZLE



THE ONLY THING WE BELIEVE

WHY CHOOSE US?

WORLD MOST ADVANCED TECHNOLOGY
WITH UNIQUE PRODUCT FEATURE



No need of Stabiliser
(90V charging)



Repairable PCB card



In-built Solar
Charge Controller



Independent Charger
recover deep discharged
battery



Extended back-up takes to
solar energy



User Friendly Interface





SMARTEN®
F U S I O N I S T H E F U T U R E



Smarten Power Systems Pvt. Ltd.

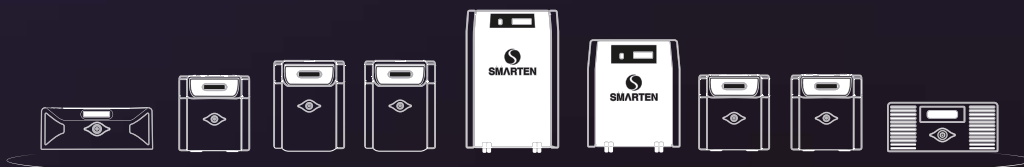
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