



PRODUCT HANDBOOK



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FOUNDER PRESIDENT : PANDIT JAWAHARLAL NEHRU

भारत सेवक समाज
BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, PROMOTED BY GOVERNMENT OF INDIA.
A CHANNEL PARTNER OF MINISTRY OF NEW AND RENEWABLE ENERGY, GOVERNMENT OF INDIA

CENTRAL PROGRAMME OFFICE

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BHARAT SEVAK SAMAJ



JAWAHARLAL NEHRU
(Founder President)

Bharat Sevak Samaj is the National Development Agency sponsored by the Planning Commission, Government of India to ensure public co-operation for implementing government plans. The main purpose behind the formulation of Bharat Sevak Samaj is to initiate a nation wide, non official and non political organization with the object of enabling individual citizens to contribute, in the form of an organized co-operative effort, to the implementation of the National Development Plan. The constitution and functioning of Bharat Sevak Samaj is approved unanimously by the Indian Parliament.



GULZARI LAL NANDA
(Founder Chairman)

VISION

" A Welfare State "

To make this a reality BSS operates through various Missions:

- Vocational Education Mission
- Smart India Mission
- BSS Community Industries
- BSS Microfinance – SHG Mission
- National Skill India Mission
- BSS Renewable Energy Division
- Indian Beautician Council
- BSS IT Mission
- Samskara Bharatham
- Green India Fabrics
- BSS Agri-Horti Mission



BSS RENEWABLE ENERGY DIVISION

- 'A' Grade - Channel Partner of MNRE
(Ministry of New & Renewable Energy),
Govt. of India.
With '2B' rating .
- Empanelled Agency of ANERT, Govt. of Kerala
For
Solar Smart
&
Solar Connect



BSS, is the only social service organization to be empanelled by ANERT and made the channel partner of MNRE, at this point in time, while all others in the list are companies.

BSS offers the best technical support and quality after-sales service to all our clients, which will in turn ensure total customer satisfaction.

BSS promotes and provides the supply and delivery of quality products which guarantee best performance.

Being a non profit body, BSS is committed to make renewable energy alternatives accessible to every household in the state through massive awareness programs, which help in offering the best to our clients.



BSS, is the first social service organization to popularize Renewable Energy Products:-

Our range of products include:

- ☒ Soorya Gramam
- ☒ Adithya 2
- ☒ Adithya 3
- ☒ Adithya 5
- ☒ Adithya 5 Special
- ☒ Solar Water Heaters
- ☒ Energy Efficient Fans
- ☒ Street/ Garden Lights
- ☒ Waste Management Systems
- ☒ Solar Connect
- ☒ Solar Smart

Let us join hands to BUILD a better INDIA.



We are ready,

ARE
YOU
READY?

SOORYAGRAMAM

DC HOME LIGHTING SYSTEM

Includes:

- 5 LED Tubelights
- 2 wall mounted fans
- 120 WP solar panel
- 12 V, 100 Ah battery
- 40m DC cable
- 15m solar cable
- Mobile charging port



* Very pocket friendly to common man.

* 3 year's service warranty.

* Very suitable for small houses, anganwadis, small shops and houseboats



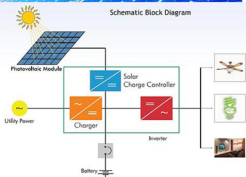
ADITYA II

- * A mini powerplant that operates totally on solar power.
- * Suitable for those who have not prepared themselves to shift to solar power totally in the near future.
- * Most of the domestic appliances like electric iron, tv, fan, mixie could be connected (except A/C, fridge & water pump)
- * Could save nearly Rs.450 in an average electricity bill.
- * 2 years service warranty.

Includes:

- 1000 VA inverter.
- 300 WP A Grade polycrystalline solar panel.
- 150 Ah solar battery.
- Panel mounting structure.
- 15m positive & negative solar cable (each).
- Battery box.





ADITYA III

- * An improved mini powerplant that operates totally on solar power.
- * Suitable for those who are in threshold of totally shifting to solar power.
- * Caters to the overall power requirement of an average modern family.
- * Most of the domestic appliances like electric iron, tv, fan, mixie could be connected (except A/C, fridge & water pump).
- * Could save nearly Rs. 600 in an average electricity bill.
- * Cuts an average wastage of 2.8 units of power daily.
- * 2 years service warranty.

Includes:

- 2000 VA inverter.
- 600 WP A Grade polycrystalline solar panel.
- 2x120 Ah solar battery.
- Panel mounting structure.
- 30m positive & negative solar cable (each).
- Battery box.





ADITYA V

- * A little genie.
- * A mini powerplant that operates totally on solar power.
- * Suitable for those who are in threshold of totally shifting to absolute solar power alternatives.
- * Most of the domestic appliances like electric iron, tv, fan, mixie could be connected (including A/C, fridge & water pump).
- * Could save nearly Rs.1500 in an average electricity bill.
- * 2 years service warranty.

Includes:

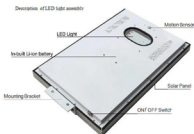
- 5000 VA inverter.
- 1500 WP A Grade polycrystalline solar panel.
- 4x150 Ah solar battery.
- Panel mounting structure.
- 30m positive & negative solar cable (each).
- Battery box.





ALL IN ONE SOLAR LED STREET LIGHT

- * Compact design with integrated Solar panel, LED light, motion sensor, Li-ion battery and Solar charge controller.
- * Completely Off-Grid design with very easy installation.
- * Microprocessor based design enables intelligent and efficient working.
- * Lithium ion battery technology provides long and maintenance free product life.
- * PIA Motion sensor adjusts LED brightness to extend light backup time.
- * Automatic Dusk-to-Dawn operation and Solar panel dirty indication LED.



SPECIFICATIONS

LED Light	12W / 15W Models available
Solar panel	Poly-crystalline 40W
Battery capacity	11.1V 10Ah / 15Ah Lithium-ion battery
Motion Sensor	PIR motion sensor (12m range) Detection: 102° Horizontal & 92° Vertical
Solar charge controller rating	5A
LUMEN Output	1200 /1500Lumen Dimming to 1/3 intensity on detecting no motion for more than 1 min.
LED Dispersion angle	120°
LED Driver efficiency	>90% (Battery to Load)
LED light operating Voltage Range	9V -12.6 V DC
Load cut-off voltage for battery deep discharge protection	9 V
Light mounting height	4m – 5m above ground level
Space between light poles	10 m– 15m
Humidity Range	0 to 95% (non-condensing)
Temperature range	0 to 60 °C
Product Warranty	2 Year (Battery warranty 1 year)
Light backup time	Full night with dimming
Net Weight	11 kg
Weight with Packing	13 kg
Dimensions (L x W x H)	70cm x 45cm x 7cm
Packing Dimensions (L x W x H)	95cm x 53cm x 16cm



SOLAR LED LANTERN

* Invade darkness with Lithium ion powered LED lantern.



Main Features

- 4 stage light output to extend battery backup time.
- Over charge and deep discharge protection provided.
- Resettable fuse provided. No need to change fuse in the event of surges.
- Charging and battery low indication provided.

SPECIFICATIONS

LED Power & Models	1 Watt (L0111W6H)	2 Watt (L0122W3H)	3 Watt (L0133W4H)
Back Up Time	Minimum 6 Hrs	Minimum 3 Hrs	Minimum 4 Hrs Maximum 18 Hrs
Battery Used	Li-ion 3.7V/ 2 AH	Li-ion 3.7V / 2 AH	Li-ion 7.4 V/ 2 AH
Body	ABS & Polycarbonate	ABS & Polycarbonate	ABS & Polycarbonate
Weight	320 grams	350 grams	450 grams
Charging / Battery Low Indication	Yes	Yes	Yes
Driver Efficiency	More than 85%	More than 85%	More than 85%
Solar Panel	3 Watt	3 Watt	3 Watt
Light Colour	Cool White	Cool White	Cool White
Warranty	1 year	1 year	1 year



ENERGY EFFICIENT CEILING FAN

- * India's most energy efficient fan.
- * Perfect blend of style and savings.



Wattage (W)	:	28
Energy use per year	:	134.4
Electricity cost per year in INR	:	806.4

SPECIFICATIONS

Warranty (Year)	3 Years
Blade Span (mm/ Inch)	1200/ 48
RPM	380
Service Value	>8
Input Voltage (V)	140- 285
Power Consumption (W)	28
Frequency (Hz)	48-52
Air Delivery (CMM)	230
Power Factor	>0.98
No. of Blades	3
Voltage THD	<10%
Current THD	<2%
Bearing (Double)	Deep Groove Double sided Steel Shielding
Remote Control	Speed Control, Timer and Sleep Mode



SOLAR SMART 2017-18

SPECIFICATIONS

- * Mono Crystalline Panel HHV/EMMVEE
- * Battery 150 x 4 Aditya/Shakti
- * Aluminium – GI Hybrid Structure
- * Analog ACDB
- * Analog DCDB
- * Automatic Change Over
- * Digital Energy Meter
- * Battery Stand – GI with powder coating



ADITYA V SPECIAL POWER PLANT

- * Solar Panel : Monocrystalline 260x6 - 1560 WP
- * Battery : Solar Tubular - Aditya/Shakti 150 Ahx6
- * Panel Mounting : Full Aluminium
- Structure
- * Battery Stand : G I
- * Lightning Arrester : Full Copper
- * ACDB : Digital
- * DCDB : Digital
- * 5000 VA inverter
- * Automatic Change Over
- * Surge protection device attached
- * 30m positive & negative cable (each)

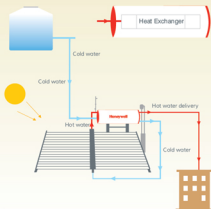


SOLAR WATER HEATER

- * Cost effective BSS- Honeywell solar water heating systems.
- * Thermosiphon technology.
- * Comprises of high quality evacuated tubes and flat plate collectors.
- * Stainless Steel (SS) series suitable for treated water.
- * Galvanised Iron (GI) series suitable for untreated water.
- * Pressurised series available for high water pressure requirements.
- * Easy to install at bungalows, apartments and various commercial spaces.



How does a pressurized solar water heating system work?



SPECIFICATIONS

SS (For Soft Water)

Capacity	LPD	100	150	200	250	300
Number of Evacuated Tubes	Units	10	15	20	25	30
Max. Working Pressure	Bar	0.5	0.5	0.5	0.5	0.5
Inner Tank Thickness	MM	0.5	0.5	0.5	0.5	0.5
Inner Tank Material	Stainless Steel - (SS304) ASTM A 240					
Heater Provision	Provided	Provided	Provided	Provided	Provided	Provided
Insulation	*PUF (Honeywell HFC-245FA) (50mm thickness)					
Stand	Available in Aluminium and Mild Steel variants					

GI (For Hard Water)

Capacity	LPD	100	150	200	250	300	500
Number of Evacuated Tubes	Units	10	15	20	25	30	28
Max. Working Pressure	Bar	0.5	0.5	0.5	0.5	0.5	0.5
Inner Tank Thickness	MM	2	2	2	2	2	2.5
Inner Tank Material	Galvanized Steel - (120GSM) IS 277						
Heater Provision	Provided	Provided	Provided	Provided	Provided	Provided	Provided
Insulation	*PUF (Honeywell HFC-245FA) (50 mm thickness)						
Stand	Available in Aluminium and Mild Steel variants						

Technical specifications subject to change without prior intimation.

* PUF - Polyurethane Foam

Direct Heating (For Soft Water)

Capacity	LPD	100	200	300	500
Number of FP Collectors	Units	1	2	3	4
Working Pressure Range	Bar	0 to 5			
Inner Tank Thickness	MM	2			
Inner Tank Material	Galvanized Steel (also known as Galvanized Iron - GI)				
Heater Provision	Provided				
Insulation	PUF (Honeywell HFC-245FA) (50mm thickness)				
Stand	Mild Steel				

In-Direct Heating (For Hard Water)

Capacity	LPD	100	200	300	500
Number of FP Collectors	Units	1	2	3	4
Heat Exchange Construction / Design	Coil type heat exchanger made of Galvanized Steel (also GI), enclosed within the storage tank				
Heat Exchange Medium	Water				
Other Accessories	Automation (filling tank to top up water in heat exchanger that may get lost to evaporation)				
Working Pressure Range	Bar	0 to 5			
Inner Tank Thickness	MM	2			
Inner Tank Material	Galvanized Steel (also known as Galvanized Iron - GI)				
Heater Provision	Provided				
Insulation	PUF (50mm thickness)				
Stand	Mild Steel				



WASTE MANAGEMENT SYSTEM

- * State of the art "BSS-Ecoman" waste management solution.
- * Unique microbial decomposition process.
- * Reduces the compost upto 90% in volume within 24 hours.
- * Quick process of converting organic waste into high quality compost.
- * Suitable for domestic and commercial usage.
- * Fully automated compact system.
- * User and environment friendly functioning process.
- * Noiseless, odorless and pathogen free.

WHAT CAN BE COMPOSTED?

Compostable Organic Waste			
			
Fruits or fruit peels	Fruits or fruit peels	Poultry, Fish & Meat	Egg & Crab Shell
			
Bakery Food	Fast Food	Meal leftovers	Garden waste
Non-Compostable (prohibited) Waste Material			
			
Rubber, Metal & Glass	Cigarettes & Batteries	Big bones	Plastic Bags, Cloth
			
Medicines / Chemical	Hard & Iron objects	Coconut shells & tree branches	Any Inorganic Material



SPECIFICATIONS



Model : F - 25

Per day waste processing capacity	20 - 25 kg
Power supply	Single 1 phase
Approx Dimensions	1.4 x 1.7 x 1.1 ft
Power rating	1.35 KW

Model : F - 75

60 - 75 kg	Per day waste processing capacity
Three phase	Power supply
5.7 x 2.4 x 1.8 ft	Approx Dimensions
3.1 KW	Power rating



Model : F - 125

Per day waste processing capacity	110 - 125 kg
Power supply	Three phase
Approx Dimensions	6.1 x 2.9 x 4.2 ft
Power rating	4.8 KW



Model : F - 250

120 - 250 kg	Per day waste processing capacity
Three phase	Power supply
7.6 x 3.9 x 5 ft	Approx Dimensions
10.4 KW	Power rating



Model : F - 700

Per day waste processing capacity	650 - 700 kg
Power supply	Three phase
Approx Dimensions	10.9 x 4.8 x 6.5 ft
Power rating	16.6 KW



Model : F - 1250

1150 - 1250 kg	Per day waste processing capacity
Three phase	Power supply
15 x 6.6 x 10.4 ft	Approx Dimensions
43 KW	Power rating

