

# EXIDE

**POWER  
THRILLS  
WITHOUT  
BILLS!**



**EXIDE SOLAR POWER  
GENERATING SYSTEM**

# SOLAR POWER GENERATING SYSTEM (SPGS)

**Solar Power Generating Systems (SPGS)** absorb sunlight and convert it into electricity for locations where Grid is inaccessible or the access is expensive. The utilization of solar energy based technologies has attracted increased interest in recent times in order to satisfy the various energy demands of society. SPGS is an emerging power generating technique which involves a combination of Solar Panel, Solar Battery, Solar Hybrid Inverter/Charge Controller.



## ADVANTAGES

- ✔ Enables energy independence
- ✔ Reduces power consumption from the grid
- ✔ Allows use of solar energy during peak times (load-shifting)
- ✔ Power available during a grid outage or blackout
- ✔ Reduce dependency on Fossil Fuel
- ✔ Green Energy



## APPLICATIONS

- ✔ Solar Lighting Systems
- ✔ Off-Grid Roof-top
- ✔ Commercial Lighting
- ✔ Solar PV Power Plant

## COMPONENTS OF SPGS

### ⚡ SOLAR PV MODULE :

**12V 40/50/75/100/125/150/200WP ; 24V 250/300/320WP**

EXIDE Brand Solar PV Polycrystalline Modules are designed as per IEC standards. These are manufactured with state of the art technology, quality raw materials and process in India ensuring High Performance, Efficiency and brand reliability.



## FEATURES

- ⚡ Best in class manufacturing technology and selected quality raw materials
- ⚡ Positive Power Output Tolerance
- ⚡ Anti-reflective White Tempered Glass (3.2mm)
- ⚡ EVA resin back sheet ensuring maximum protection from extreme environmental conditions
- ⚡ Light Color Backlight - Back-up Operation
- ⚡ High torsion strength & corrosion resistance anodized aluminum frame provide maximum structural strength & ease of installation
- ⚡ Excellent performance under high temperature and low irradiance conditions
- ⚡ Available for DC 12V/24V system
- ⚡ Compliance to IEC standards - IEC 61215 & IEC 61730

## **⚡ SOLATUBULAR & SOLARBLITZ BATTERIES:**

### **SOLATUBULAR/SOLARBLITZ RANGE (12V 40/75/100/105/120/150/180/200Ah)**

The power requirements of domestic and commercial consumers are increasing continuously where Renewable Energy is playing a vital role as an alternative source of energy which is sustainable and economic.

The success of SPGS largely depends on the efficiency of its storage. Storage of solar power is a challenge as the electricity produced from solar panels is intermittent. Exide solar batteries are specially designed and manufactured with selected raw materials in state-of-the-art manufacturing plants to suit the rigors of daily charge-discharge cycle at a high ambient temperature and work efficiently in Partial State of Charge (PSOC) condition.



### **FEATURES**

- ⚡ Batteries are made of time tested Exide Torr Tubular Positive Plates
- ⚡ Available in Premium Tall Tubular & Short Tubular ranges
- ⚡ Ultra Low Maintenance
- ⚡ Ideal for frequent cyclic duty
- ⚡ Superior Cycle life
- ⚡ Faster recharging option
- ⚡ SOLATUBULAR & SOLARBLITZ 12V ranges meets & exceeds the performance requirement of IS 13369 specification with latest amendments

## **⚡ CHARGE CONTROLLERS :**

### **12/24V – 6A/10A/20A**

Charge controller is an extremely sophisticated and user friendly software for low cost usage, and with a feature of automatic recognition for 12 V or 24 V DC.

The main features includes features like excellent status display, warning and safety functions apart from highly efficient charging technology. The charge controller allows low voltage disconnect function through temperature compensated PWM charging.



### **FEATURES**

- ⚡ Efficient Charging technology
- ⚡ Temperature Compensation
- ⚡ LED Display
- ⚡ Inbuilt Protections like:
  - ▶ Short Circuit Protection and Overload Protection for Load Line
  - ▶ Reverse Polarity Protection for Battery and SPV











## **INVERTERS :**

▶ **700/900/1100-12V** ▶ **1500/2.2-24V** ▶ **2.5/3.0/3.5/5.2-48V**

EXIDE Solar Hybrid Inverters are DSP & Microcontroller based design to deliver pure sine wave output with protection against short circuits and overload. These ranges has an intelligent charging profile selection for minimum utilization of mains supply ensuring high solar charging efficiency.



## **FEATURES**

-  Pure Sine Wave Output Wave Shape same as Grid Power
-  More Reliable with SMT Technology of SMD Components
-  Higher Efficiency ( $\geq 95\%$ ) In-built Solar Charge Controller\*
-  Mains Power Saving
-  Attractive Big Size LCD Display with Tri-Color Backlights
  - ▶ Light Color Backlight - Back-up Operation
  - ▶ Bright Color Backlight - Mains Operation
  - ▶ Red Color Backlight - Any Protection
-  PV Reverse Protection In-built
-  Reverse Current Flow Protection (Battery to Solar Panel specially in nights) In-built
-  Fast Charging Technique through Mains & Solar Power under ASIC Charging Algorithm
-  Wide Mains Voltage Input Range for Battery Charging i.e. 90V – 300V in Normal Mode
-  Easy to Service and Installation Operation

HYBRID AC MODEL	MODEL NOMENCLATURE	DESCRIPTION	Estimated Back-up on Full Load (Hrs.)	Estimated Utilisation of Solar Energy (%)	Estimated Utilisation of Grid (%)	Estimated Annual Solar Generation (Units)	Estimated Area for Installation of Solar Module (Sq.M)
LKVA PPT 700	SPGS SHU 7	125Wp*2+6LMS150+700	2.6	84%	16%	300	2.5
	SPGS SHU 8	125Wp*2+6LMS150L+700	2.8	78%	22%	300	2.5
	SPGS SHU 73	100Wp*2+6LMS150L+ 700	3.0	58%	42%	240	2.0
	SPGS SHU 74	150Wp+6LMS150L+ 700	3.0	43%	57%	180	1.5
	SPGS SHU 75	150Wp+6LMS120L+ 700	2.4	54%	46%	180	1.5
	SPGS SHU 93	125Wp*2+6LMS150L*2+700	6.1	36%	64%	300	2.5
LKVA PPT 900	SPGS SHU 05	150Wp*2+6LMS150+900	2.0	95%	5%	360	3.0
	SPGS SHU 06	150Wp*2+6LMS150L+900	2.2	93%	7%	360	3.0
	SPGS SHU 13	150Wp+6LMS150+900	2.0	51%	49%	180	1.5
	SPGS SHU 14	150Wp+6LMS150L+900	2.2	47%	53%	180	1.5
	SPGS SHU 19	150W*2+6LMS180L+900	2.8	72%	28%	360	3.0
	SPGS SHU 21	150W*2+6LMS200L+900	3.1	65%	35%	360	3.0
	SPGS SHU 25	100Wp+6LMS100L+900	1.5	43%	57%	120	1.0
	SPGS SHU 26	100Wp+6SBZ105L+900	1.6	41%	59%	120	1.0
	SPGS SHU 27	125Wp+6LMS120L+900	1.9	45%	55%	150	1.3
	SPGS SHU 28	100Wp*2+6LMS150L+900	2.3	58%	42%	240	2.0
	SPGS SHU 30	150Wp+6LMS120L+900	1.9	54%	46%	180	1.5
	SPGS SHU 42	150W*2+6LMS200+900	2.6	76%	24%	360	3.0
	SPGS SHU 45	125Wp*2+6LMS150+900	2.0	84%	16%	300	2.5
	SPGS SHU 46	125Wp*2+6LMS150L+900	2.3	72%	28%	300	2.5
	SPGS SHU 72	150Wp*2+6LMS120L*2+ 900	3.7	54%	46%	360	3.0
	SPGS SHU 76	125Wp*2+6LMS100L*2+ 900	3.1	54%	46%	300	2.5
	SPGS SHU 89	200Wp+6LMS150L+900	2.3	58%	42%	240	2.0
	SPGS SHU 59	150W*2+6LMS200L+900	3.1	65%	35%	360	3.0
SPGS SHU 62	125Wp*2+6LMS200L+900	3.1	54%	46%	300	2.5	
SPGS SHU 94	125Wp*2+6LMS150L*2+900	4.6	36%	64%	300	2.5	
LKVA PPT 1100	SPGS SHU 03	150Wp*2+6LMS150+1100	1.5	95%	5%	360	3.0
	SPGS SHU 04	150Wp*2+6LMS150L+1100	1.7	93%	7%	360	3.0
	SPGS SHU 11	150Wp+6LMS150+1100	1.5	51%	49%	180	1.5
	SPGS SHU 12	150Wp+6LMS150L+1100	1.7	47%	53%	180	1.5
	SPGS SHU 20	150W*2+6LMS180L+1100	2.1	72%	28%	360	3.0
	SPGS SHU 22	150W*2+6LMS200L+1100	2.4	65%	35%	360	3.0
	SPGS SHU 29	100Wp*2+6LMS150L+1100	1.8	58%	42%	240	2.0
	SPGS SHU 43	150W*2+6LMS200+1100	2.0	76%	24%	360	3.0
	SPGS SHU 60	150W*2+6LMS200L+1100	2.4	65%	35%	360	3.0
	SPGS SHU 70	100W*2+6LMS100L*2+1100	2.4	43%	57%	240	2.0
	SPGS SHU 82	125Wp*2+6LMS100L*2+1100	2.4	54%	46%	300	2.5
	SPGS SHU 84	150Wp*2+6LMS150L*2+1100	3.6	43%	57%	360	3.0
LKVA PPT 1500	SPGS SHU 01	300Wp+6LMS150*2+1500	2.3	51%	49%	360	3.0
	SPGS SHU 02	300Wp+6LMS150L*2+1500	2.5	47%	53%	360	3.0
	SPGS SHU 15	150Wp*2+6LMS150*2+1500	2.3	51%	49%	360	3.0
	SPGS SHU 16	150Wp*2+6LMS150L*2+1500	2.5	47%	53%	360	3.0
	SPGS SHU 17	150W*4+6LMS200L*2+1500	3.4	70%	30%	720	6.0
	SPGS SHU 18	150W*4+6LMS180L*2+1500	3.3	72%	28%	720	6.0
	SPGS SHU 23	250Wp+6LMS150*2+1500	2.3	42%	58%	300	2.5
	SPGS SHU 24	250Wp+6LMS150L*2+1500	2.7	36%	64%	300	2.5
	SPGS SHU 40	150W*2+6LMS120L*2+1500	2.2	54%	46%	360	3.0
	SPGS SHU 41	150W*4+6LMS200*2+1500	3.1	76%	24%	720	6.0
	SPGS SHU 44	250Wp+6LMS200*2+1500	3.1	32%	68%	300	2.5
	SPGS SHU 58	150W*4+6LMS200L*2+1500	3.6	65%	35%	720	6.0
	SPGS SHU 61	250Wp+6LMS200L*2+1500	3.6	27%	73%	300	2.5
	SPGS SHU 95	125Wp*2+6LMS150L*2+1500	2.6	36%	64%	300	2.5
HKVA PPT 2.2	SPGS SHU 31	250W*4+6LMS150L*4+2.2	3.6	72%	28%	1200	10.0
	SPGS SHU 97	250W*2+6LMS150*2+2.2	1.5	84%	16%	600	5.0
	SPGS SHU 98	250W*2+6LMS150L*2+2.2	1.8	72%	28%	600	5.0
	SPGS SHU 103	300W*2+6LMS150*2+2.2	1.5	95%	5%	720	6.0
HKVA PPT 2.5	SPGS SHU 32	250W*6+6LMS150L*4+2.5	3.2	95%	5%	1800	15.0
HKVA PPT 3.0	SPGS SHU 33	250W*6+6LMS150L*4+3.0	2.6	95%	5%	1800	15.0
HKVA PPT 3.5	SPGS SHU 34	250W*6+6LMS150L*4+3.5	2.3	95%	5%	1800	15.0
	SPGS SHU 35	250W*6+6LMS120L*4+3.5	1.8	95%	5%	1800	15.0
HKVA PPT 5.2	SPGS SHU 36	250W*12+6LMS150L*8+5.2	3.0	95%	5%	3600	30.0
	SPGS SHU 37	250W*12+6LMS120L*8+5.2	2.4	95%	5%	3600	30.0

DC MODEL	MODEL NOMENCLATURE	DESCRIPTION	Maximum Load (Watt)	Estimated Back-up (Hrs.)	Estimated Annual Solar Generation (Units)	Estimated Area for Installation of Solar Module (Sq.M)
DC CCU 6A	SPGS DC 114	40WP+6LMS20+12V6ACC	12	12.00	48	0.40
	SPGS DC 09	40Wp+6LMS40+CCU 6A	15	9.50	48	0.40
	SPGS DC 10	40Wp+6SBZ40+CCU 6A	15	9.00	48	0.40
	SPGS DC 69	40Wp+6SBZ40L+12V6ACCU	15	10.00	48	0.40
	SPGS DC 78	50Wp+6LMS40+12V6ACCU	20	9.50	60	0.50
	SPGS DC 85	50Wp+6SBZ40+12V6ACCU	20	9.00	60	0.50
	SPGS DC 107	50Wp+6LMS40L+12V6ACC	20	10.00	60	0.50
	SPGS DC 38	75Wp+6LMS40+12V6ACC	45	4.50	90	0.75
	SPGS DC 47	75Wp+6SBZ40L+12V6ACC	45	5.00	90	0.75
	SPGS DC 39	75Wp+6LMS75+12V6ACC	45	5.50	90	0.75
SPGS DC 64	75Wp+6SBZ75L+12V6ACC	45	6.00	90	0.75	
DC CCU 10A	SPGS DC 51	100Wp+6LMS40+12V10ACC	65	4.00	120	1.00
	SPGS DC 63	100Wp+6LMS75+12V10ACC	65	4.50	120	1.00
	SPGS DC 87	75Wp+6LMS75L+12V10ACC	65	5.00	120	1.00
	SPGS DC 90	100Wp+6LMS100+12V10ACC	65	5.50	120	1.00
	SPGS DC 48	100Wp+6LMS100L+12V10ACC	65	6.00	120	1.00
	SPGS DC 49	100Wp+6SBZ105L+12V10ACC	65	6.00	120	1.00
	SPGS DC 77	125Wp+6LMS100L+12V10ACC	70	6.50	120	1.25
	SPGS DC 52	150Wp+6LMS75+12V10ACC	75	5.00	150	1.50
	SPGS DC 83	150Wp+6SBZ105L+12V10ACC	75	6.00	180	1.50
	SPGS DC 81	150Wp+6LMS120L+12V10ACC	75	6.50	180	1.50
	SPGS DC 71	150Wp+6LMS150+12V10ACC	75	6.70	180	1.50
	SPGS DC 50	150Wp+6LMS150L+12V10ACC	75	7.20	180	1.50
DC CCU 20A	SPGS DC 55	100W*2+6LMS150L+12V20ACC	100	6.00	240	2.00
	SPGS DC 67	100W*2+6LMS180L+12V20ACC	100	6.50	240	2.00
	SPGS DC 66	100W*2+6LMS200L+12V20ACC	100	7.00	240	2.00
	SPGS DC 56	125W*2+6LMS100L*2+20ACC	125	6.50	300	2.50
	SPGS DC 86	150Wp+6LMS100L+12V20ACC	75	6.00	180	1.50
	SPGS DC 110	150W*2+6SBZ105L+12V20ACC	150	6.00	360	3.00
	SPGS DC 57	150W*2+6LMS120L*2+20ACC	150	6.50	360	3.00
	SPGS DC 111	150W*2+6LMS150L+12V20ACC	150	6.00	360	3.00
	SPGS DC 115	150W*2+6LMS150L*2+12V20ACC	150	7.00	360	3.00
	SPGS DC 80	250Wp+6LMS150L*2+12V20ACC	125	7.00	300	2.50
	SPGS DC 92	250Wp+6LMS150*2+12V20ACC	125	6.70	300	2.50
	SPGS DC 104	250Wp+6LMS120L*2+12V20ACC	125	6.50	300	2.50
	SPGS DC 112	250W*2+6LMS150L*2+12V20ACC	250	7.00	600	5.00
	SPGS DC 79	300Wp+6LMS200L*2+12V20ACC	150	7.50	360	3.00
	SPGS DC 113	300W*2+6LMS150L*2+12V20ACC	300	7.00	720	6.00



## DC LOADS

LED Luminaries : 3W/6W

12V DC TV : 25W

DC Fan : 18W/20W

TUBE LIGHT : 7W/9W

\*Note: Various combinations of SPGS models are available in the Price List. Company representatives & authorized dealers can be contacted for any technical or commercial assistance.

# EXIDE

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