



**SMG POWER SOLUTION**

WELCOME SUN TO HOME

## Semi-Integrated Lights





**9W-120W**

**Semi-Integrated Solar Light**

Product Code	Wattage	Battery Details	Solar Panel
SMG PR009WSISSTLAH0	9W	12.8V/6Ah LPF	40W
SMG PR012WSISSTLAH0	12/15W	12.8V/12Ah LPF	50W
SMG PR020WSISSTLAH0	18/20W	12.8V/18Ah LPF	60W
SMG PR024WSISSTLAH0	24W	12.8V/18Ah LPF	80W
SMG PR030WSISSTLAH0	30W	12.8V/24Ah LPF	80W
SMG PR040WSISSTLAH0	36-40W	12.8V/36Ah LPF	100W

SMG PR050WSISSTLAH0	50W	12.8V/42Ah LPF	140W
SMG PR060WSISSTLAH0	60W	12.8V/54Ah LPF	160W
SMG PR080WSISSTLAH0	80W	12.8V/72Ah LPF	180W
SMG PR100WSISSTLAH0	100W	12.8V/72Ah LPF	200W
SMG PR120WSISSTLAH0	120W	12.8V/96Ah LPF	240W

---

# Integrated Lights



**9W to 100W**

Product Code	Wattage	Battery Details	Solar Panel
SMG PR09WISSTLAH000	9W	12.8V/6Ah LPF	30W
SMG PR12WISSTLAH000	12W	12.8V/12Ah LPF	40W
SMG PR15WISSTLAH000	15W	12.8V/12Ah LPF	40W
SMG PR18WISSTLAH000	18-20W	12.8V/18Ah LPF	50W
SMG PR24WISSTLAH000	24W	12.8V/18Ah LPF	60W
SMG PR30WISSTLAH000	30W	12.8V/24Ah LPF	60W
SMG PR40WISSTLAH000	40W	12.8V/36Ah LPF	80W
SMG PR50WISSTLAH000	50W	12.8V/42Ah LPF	100W
SMG PR60WISSTLAH000	60W	12.8V/54Ah LPF	120W
SMG PR80WISSTLAH000	80W	12.8V/72Ah LPF	160W
SMG PR100WISSTLAH000	100W	12.8V/96Ah LPF	200W

# High-Mask Solar Lights



**Flood Light**



**Street Light**

Product Code	Wattage	Battery Details	Solar Panel
SMG PR090W	90W	25.6V/60Ah LPF	260W
SMG PR120W	120W	25.6V/72Ah LPF	300W
SMG PR150W	75W*2	25.6V/84Ah LPF	400W
SMG PR180W	90W*2	25.6V/120Ah LPF	520W
SMG PR200W	100W*2	12.8V/144Ah LPF	580W

## Technical Specifications: Solar Light

- LED Light Lumens: 120/150lm/W.
- BIS Certified Battery- Yes.
- IEC Certified Solar MMPT Charge Controller- Yes.
- MNRE/BIS Approved Mono-crystalline Solar Panel-Yes.
- Charge Time: 5 to 7 Hours Good Sunshine.
- Backup Time: 2 Days autonomy.
- Easy to Install & Ready to use.
- LED Dispersion angle- 120°/145°.
- Light mounting height-4m to 8m above ground depending on LED Wattage.
- Humidity Range-0 to 95% (non-condensing).
- Temperature range-0 to 60 °C.

LED Indication	Condition
RED: Continuous On	Battery full discharged.
GREEN: LED Blink	Battery in charging mode.
GREEN: Continuous On	Battery fully charged.

## Protections:-

- Solar Charger controller rating -5A/10A/15A/25A.
  - LED Driver efficiency- >95% (Battery to Load).
  - Battery Reverses Polarity Protection- Yes.
  - Solar Panel Reverse Polarity Protection- Yes.
  - Load Short Circuit Protection-Yes.
  - Battery Low Load Disconnection Yes.
  - Battery Full Cut-OFF- Yes.
  - Protection Grade (IP)-65- Yes.
  - Over Temperature Protection-75- Yes.
-

# Hybrid Solar Inverter



## Features

- Single-phase hybrid solar inverter.
- Support lithium battery charging and discharging management.
- Optional Wi-Fi module, supports remote App monitoring.
- Highly integrated plug.
- Maximum efficiency increased 98.7%.
- Seamlessly enable backup power.
- Easy to install and maintain.
- Support lithium battery adaptive.
- 5 years warranty.

## Input Parameters

Voltage	: 240V
Frequency	: 50/60Hz
Efficiency	: 93%
Working Temperature	: -10° to 50°C
Storage Temperature	: -15° to 60°C
Communication Interface	: RS232/RS485/ CAN / Dry contact

## Output Parameters

AC Stabilized Voltage	: 230V AC (+/-5%)
Surge Power	: 7KVA/11KVA/16KVA
Switching Time	: 10ms for PC / 20ms for Home appliances
Waveform	: Pure sine wave

## Technical Parameters

Sr.No	Model	Rated power	Max. Photo-voltaic Power	Max. PV Open Circuit Voltage	MPPT Range & Working Voltage	Max. PV charging Current	Max. AC Charging Current
1	SMG PR HF 3500-24	3500VA /3500W	3500W	500V	120~450V DC	100A	60A
2	SMG PR HF 5500-48	5500VA /5500W	5500W	500V	120~450V DC	100A	60A
3	SMG PR HF 8000-48 Plus	8000VA /8000W	8000W	500V	120~450V DC	120A	120A

# Three Phase On-Grid Inverter Datasheet

## Three Phase String Inverter



**SMG 5.0K-3P | SMG 6.0K-3P | SMG 8.0K-3P | SMG 10K-3P | SMG 12K-3P**

- Zero Export & VSG Application
- Low Start-Up Voltage of 80V
- Wide Output Voltage Range
- Inbuilt Wifi GPRS (Optional)
- Suited for Outdoor
- **BIS Certified 10 Years Warranty**
- Easy to Service
- Cloud Based Monitoring

### DC Input

Parameter	SMG 5.0K-3P	SMG 6.0K-3P	SMG 8.0K-3P	SMG 10K-3P	SMG 12K-3P
Start up DC Input Voltage(V)	140	250	250	250	250
MPPT Operating Range (v)	120-1000	200-1000	200-1000	200-1000	200-1000
MAX. DC Input Power (KW)	6.5	7.8	10.4	13	15.6
MAX. DC Input Voltage (v)	1100	1100	1100	1100	1100
Max DC Input Current (A)	20+20	30+30	30+30	30+30	30+30
Max Short Circuit Current(A)	20+20	30+30	30+30	30+30	30+30
No. of MPP Tracker	2	2	2	2	2
No. of strings per MPP Tracker	1+1	1+1	1+1	1+1	1+1

### AC Output

Rated Output Power (KW)	5	6	8	10	12
Max. Active Power (kW)	5.5	6.6	8.8	11	13.2
Rated Ac Grid Output Current	7.6/7.2	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max. AC Output Current (A)	8.3/8	10/9.6	13.3/12.7	16.7/15.9	20/19.1

- Rated Output Voltage/range (V): 400V AC (3P + N + E)
- Rated Grid Frequency (Hz): 50/60 (optional)
- Operating Phase: Three Phase
- Output Power Factor: 0.8 Leading to 0.8 lagging
- Total Harmonics Current Distortion (THDi): <0.3%
- DC Injection Current (mA): <0.5%
- Grid Frequency Range (Hz): 45-55

## Efficiency

- Max. Efficiency (Inverter): 98.30%
- Euro Efficiency: 97.50%
- MPPT Efficiency: >99%

## Protections

- DC Reverse - Polarity Protection
- AC Short Circuit Protection
- AC Output Overcurrent Protection
- Output Overvoltage Protection
- Insulation Resistance Protection
- Ground Fault Monitoring
- Anti-Islanding Protection
- Temperature Protection
- Integrated DC Switch
- Remote Software Upload
- Remote Change Operating Parameters
- Surge Protection (DC Type II / AC Type II)

## Mechanical & Environmental

- Size(mm): 330W × 457H × 203D
- Colour Shade: #383636 & #716C
- Weight(kg): 11
- Topology: Transformerless
- Internal Consumption: <1W (Night)
- Operating Temperature: -25° to +60° C (derating above 45°)
- Ingress Protection: IP65
- Noise Emission (Typical): ≤30dB Natural Cooling
- Max. Operating Altitude Without Derating: 4000m
- Certifications: IEC 62116, IEC 61727, IEC60068-2-1,2,14,30,27,64, IEC 61683, IEC 61000 1/2, IEC 62109-1&2
- Humidity: 0-100% (Non Condensing)
- LCD1602
- RS485/RS232/Wifi/GPRS

## Three Phase String Inverter



**SMG 15K-3P | SMG 18K-3P | SMG 20K-3P | SMG 25K-3P**

- Zero Export & VSG Application
- Low Start-Up Voltage of 80V
- Wide Output Voltage Range
- Inbuilt Wifi GPRS (Optional)
- Suited for Outdoor
- **BIS Certified 10 Years Warranty**
- Easy to Service
- Cloud Based Monitoring

### DC Input

Parameter	SMG 15K-3P	SMG 18K-3P	SMG 20K-3P	SMG 25K-3P
MAX. DC Input Power (KW)	19.5	23.4	26	32.5
MAX. DC Input Voltage (v)	1100	1100	1100	1100
Start up DC Input Voltage(V)	250	250	250	250
MPPT Operating Range (v)	200-1000	200-1000	200-1000	200-1000
Max DC Input Current (A)	20+26	26+26	26+26	26+26
Max Short Circuit Current(A)	30+39	39+39	39+39	39+39
No. of MPP Tracker	2	2	2	2
No. of strings per MPP Tracker	1+2	2+2	2+2	2+2

## AC Output

Rated Output Power (KW)	15	18	20	25
Max. Active Power (kW)	16.5	19.8	22	27.5
Rated Ac Grid Output Current	22.7/21.7	27.3/26.1	30.3/29	37.9/36.2
Max. AC Output Current (A)	25/23.9	30/28.7	33.3/21.9	41.7/39.8

- Rated Output Voltage/range (V): 400V AC (3P + N + E)
- Rated Grid Frequency (Hz): 50/60 (optional)
- Operating Phase: Three Phase
- Output Power Factor: 0.8 Leading to 0.8 lagging
- Total Harmonics Current Distortion (THDi): <0.3%
- DC Injection Current (mA): <0.5%
- Grid Frequency Range (Hz): 45-55

## Efficiency

Parameter	Value
Max. Efficiency (Inverter)	98.50% / 98.60%
Euro Efficiency	97.50% / 97.83%
MPPT Efficiency	>99%

## Protections

- DC Reverse - Polarity Protection
- AC Short Circuit Protection
- AC Output Overcurrent Protection
- Output Overvoltage Protection
- Insulation Resistance Protection
- Ground Fault Monitoring
- Anti-Islanding Protection
- Temperature Protection
- Integrated DC Switch
- Remote Software Upload
- Remote Change Operating Parameters
- Surge Protection (DC Type II / AC Type II)

## Mechanical & Environmental

- Weight(kg): 15 / 20
- Size(mm): 283W × 463H × 178D / 362W × 527H × 220D
- Colour

# SINGLE PHASE ON-GRID INVERTER DATASHEET

SMG 1.5K-1P | SMG 2.2K-1P | SMG 3.0K-1P | SMG 4.0K-1P | SMG 5.0K-1P | SMG 6.0K-1P

- BIS Certified – 10 Years Warranty
- Easy to Service
- Cloud Based Monitoring
- Zero Export & VSG Application
- Low Start-Up Voltage of 80V
- 20A String Current
- Suited for Outdoor
- Wide Output Voltage Range
- Inbuilt Wifi GPRS (Optional)

## Technical Data

### Input Side

MODEL	SMG 1.5K-1P	SMG 2.2K-1P	SMG 3.0K-1P	SMG 4.0K-1P	SMG 5.0K-1P	SMG 6.0K-1P
MAX. DC Input Power (KW)	2	2.9	3.9	5.2	6.5	7.8
MAX. DC Input Voltage (V)			550			
Start up DC Input Voltage (V)			80			
MPPT Operating Range (V)			70-500	70-500		
MAX DC Input Current (A)			20	20		
MAX Short Circuit Current (A)			30			
No. Of MPP Tracker			1			
No. strings per MPP Tracker		1			2	2

### Output Side

MODEL	SMG 1.5K-1P	SMG 2.2K-1P	SMG 3.0K-1P	SMG 4.0K-1P	SMG 5.0K-1P	SMG 6.0K-1P
Rated Output Power (KW)	1.5	2.2	3	4	5	6
MAX. Active Power (KW)	1.65	2.42	3.3	4.4	5.5	6.6
Rated Output Voltage/range (V)			230V AC (L+N+E)			
Rated Grid Frequency (Hz)	50/60 (Optional)	50/60 (Optional)	50/60 (Optional)	50/60 (Optional)		
Operating Phase			Single Phase	Single Phase		

MODEL	SMG 1.5K-1P	SMG 2.2K-1P	SMG 3.0K-1P	SMG 4.0K-1P	SMG 5.0K-1P	SMG 6.0K-1P
Rated Ac Gride Output Current	6.5	9.6	13	17.4	22.8/21.8	27.3/26.1
Max. AC Output Current (A)	7.2	10.5	14.3	19.1	25/24	30/28.7
Output Power Factor			0.8 leading to 0.8 lagging			

THDi

DC Injection Current (mA)

Grid Frequency Range (Hz) 45-55

## Efficiency

MODEL	SMG 1.5K-1P	SMG 2.2K-1P	SMG 3.0K-1P	SMG 4.0K-1P	SMG 5.0K-1P	SMG 6.0K-1P
Max. Efficiency (Inverter)	97.30%	97.30%	97.50%	97.50%	97.50%	97.50%
Euro Efficiency	97.10%	97.10%	97.30%	97.30%		97.00%
MPPT Efficiency			>99%			

## Protections

- DC Reverse Polarity Protection
- AC Short Circuit Protection
- AC Output Overcurrent Protection
- Output Overvoltage Protection
- Insulation Resistance Protection
- Ground Fault Monitoring
- Anti-Islanding Protection
- Temperature Protection
- Integrated DC Switch
- Remote Software Upload
- Remote Change Operating Parameters
- Surge Protection (DC Type II / AC Type II)

## General Data

Parameter	Value
Size (mm)	280W×310H×184D (SMG 1.5–3.0K) / 330W×323H×190D (SMG 4.0–6.0K)
Colour Shade	383636 & 716C
Weight (kg)	4.8 (SMG 2.2K) / 7.7 (SMG 5.0K)
Topology	Transformerless
Internal Consumption	
Operating Temperature	–25°C to +60°C (derating above 45°)
Ingress Protection	IP65
Noise Emission (Typical)	≤35dB

Parameter	Value
Cooling Type	Natural Cooling
Max. Operating Altitude Without Derating	2000m (SMG 2.2K) / 3000m (SMG 5.0K)
Certifications	IEC 62116, IEC 61727, IEC60068-2-1,2,14,30,27,64, IEC 61683, IEC 61000 1/2, IEC 62109-1&2
Humidity	0–100% (Non Condensing)
Display	LCD1602
Interface	RS485 / RS232 / Wifi / GPRS



 **25/2, R.K.Layout, 16<sup>Th</sup> Main ,5<sup>Th</sup> Cross, R.K layout,Padmanabhanagar-Bangalore -560070,**



<https://www.smgpowersolution.com>



[smgpowersolution@zohomail.in](mailto:smgpowersolution@zohomail.in)



**+91 7892903806, +91 7204523401**