



One System. Endless Energy

Complete energy solutions for uninterrupted power

Solar Kit



Genset



BESS



Powering a Sustainable Future

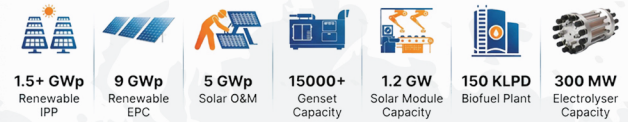
www.jakson.com





OUR STORY

JAKSON Group has grown since 1947 into a leading energy and sustainable solutions provider, driving innovation, supporting power generation, and helping customers meet their needs safely and sustainably.



Powering Excellence with JAKSON

JAKSON delivers end-to-end energy solutions through a dedicated team of experts, ensuring smooth execution from survey to support. All systems are designed in compliance with relevant industry standards for dependable performance. Installations are carried out by certified professionals with a strong focus on quality. Every project undergoes multi-level audits and quality checks, with robust safety and protection systems built in for secure and reliable operations.

JAKSON Expertise



SAFETY
Advanced electrical protection systems



AUDIT
Multi-level quality checks



INSTALLATION
Certified professional installation



COMPLIANCE
MNRE & IS compliant systems



DEDICATED TEAM
Expert end-to-end execution

WHY CHOOSE US?

JAKSON delivers a seamless energy journey through advanced manufacturing, strong engineering expertise, and end-to-end project execution. From high-efficiency solutions to reliable on-ground support, we ensure trusted performance and long-term value with complete peace of mind.

ONE STOP SOLUTION

Complete energy solutions from design and manufacturing to installation & commissioning all under one roof.



ADVANCED MANUFACTURING

State-of-the-art manufacturing facilities with high-capacity production lines ensuring consistent quality & performance.



Reliable Support

Dedicated support from site survey to after-sales service, with expert teams available at every step.



EASY BUYING

Flexible financing options and a simplified process to make solar adoption easy and hassle-free.



TRUSTED QUALITY

High-efficiency, rigorously tested products built to deliver long-term reliability and strong energy output.





JAKSON SOLAR KIT

Everything You Need, One Trusted Kit

3.3kW | 5kW | 10kW



SOLAR KIT SPECIFICATIONS

SINGLE PHASE SOLAR KIT

3.3kW GTI Kit BOM				
Sr. No.	Item	Rating	Qty.	UOM
1	Solar PV Modules - DCR Mono PERC 	545Wp/6 nos.	3270	Watt
2	Solar PV Grid-Tied Inverter with 10 Years Standard Warranty 	3.3kW/Single Phase	1	Nos.
3	DCDB 	1 IN 1 OUT	1	Nos.
4	ACDB with LED indications 	1kW-5kW	1	Nos.
5	MC4 connectors 	30A	4	Pair
6	Lighting Arrestor 	1 mtr	1	Set
7	Earthing kit with compound & pit cover 	1 DC, 1 AC, 1 LA	3	Set

5kW GTI Kit BOM				
Sr. No.	Item	Rating	Qty.	UOM
1	Solar PV Modules - DCR Mono PERC 	545Wp/10 nos.	5450	Watt
2	Solar PV Grid-Tied Inverter with 10 Years Standard Warranty 	5kW/Single Phase	1	Nos.
3	DCDB 	1 IN 1 OUT	1	Nos.
4	ACDB with LED indications 	1kW-5kW	1	Nos.
5	MC4 connectors 	30A	4	Pair
6	Lighting Arrestor 	1 mtr	1	Set
7	Earthing kit with compound & pit cover 	1 DC, 1 AC, 1 LA	3	Set

THREE PHASE SOLAR KIT

With DCR Module - 10kW GTI Kit BOM				
Sr. No.	Item	Rating	Qty.	UOM
1	Solar PV Modules - DCR Mono PERC 	545Wp/18 nos.	9810	Watt
2	Solar PV Grid-Tied Inverter with 10 Years Standard Warranty 	10kW/Three Phase	1	Nos.
3	DCDB 	2 IN 2 OUT	1	Nos.
4	ACDB with LED indications 	10kW/3 phase	1	Nos.
5	MC4 connectors 	30A	4	Pair
6	Lighting Arrestor 	1 mtr	1	Set
7	Earthing kit with compound & pit cover 	1 DC, 1 AC, 1 LA	3	Set

With Non-DCR Module- 10kW GTI Kit BOM				
Sr. No.	Item	Rating	Qty.	UOM
1	Solar PV Modules - NDCR TOPCon 	590Wp/17 nos.	10030	Watt
2	Solar PV Grid-Tied Inverter with 10 Years Standard Warranty 	10kW/Three Phase	1	Nos.
3	DCDB 	2 IN 2 OUT	1	Nos.
4	ACDB with LED indications 	10kW/3 phase	1	Nos.
5	MC4 connectors 	30A	4	Pair
6	Lighting Arrestor 	1 mtr	1	Set
7	Earthing kit with compound & pit cover 	1 DC, 1 AC, 1 LA	3	Set



High-Efficiency DCR Solar Kit for Reliable Clean Power

DCR Solar Kit delivers reliable, efficient power with durable components, easy installation, reduced bills, and long-term sustainable energy security.

Smart Solar Inverter for Efficient Power

Solar inverter ensures efficient DC-to-AC conversion, smart monitoring, safety features, reliable performance, reduced downtime, and long-term energy savings.



DCDB and ACDB: Smart Safety for Solar Systems

DCDB and ACDB are key protection units in a solar kit, ensuring safe power flow and system reliability. DCDB protects the DC side from panels to inverter, while ACDB secures AC output to load or grid. With breakers and surge protection, they improve safety, control, and performance.



Reliable Grounding with Earthing Compound

Earthing compound enhances grounding efficiency and ensures electrical safety in solar installations. It improves soil conductivity around the electrode, enabling low-resistance grounding and effective fault current dissipation. Durable and weather-resistant, it protects equipment and users from surges, leakage currents, and lightning, ensuring reliable system performance.



Protect Your Solar System With Lightning Arrestor

A lightning arrester protects solar installations from high-voltage surges caused by lightning strikes and sudden electrical spikes. It safely diverts excess voltage to the ground, preventing damage to panels, inverters, and connected equipment. Designed for durability and fast response, it enhances overall system safety, reduces risk of failure, and ensures uninterrupted solar performance during extreme weather conditions.





Mono PERC Bifacial Half-Cut DCR Glass to Glass Solar PV Modules

M10 CELLS

530-550 W

RPS2MH72BDXXX



ALMM
APPROVED

BIFACIALITY
FACTOR



Ideal for

Commercial & Industrial Projects,
Residential Projects, Institutional
Projects, Off-grid Projects



Smart Efficiency
**Advanced
technologies**

Multi-bus bar / PERC / Ga Doped / Half cut/
M10 cell / smart soldering.



2400Pa-5400Pa
**Heavy snow, hail,
wind-load resistant**

Enhanced mechanical load up to 5400 Pascals of snow load
and up to 2400 Pascals of wind load.



Durable
**Reliable modules
with longer lifespan**

Hotspot resistant, micro cracking resistant, 0.45% Linear
degradation over 30 years, less damage due to weather stress.



Weak Light
**Excellent low
light performance**

More power output in weak light conditions (early morning/sunset/cloudy).
Suitable for large scale utility and ground mount projects.

545W
MAXIMUM POWER OUTPUT

21.10%
MAXIMUM EFFICIENCY

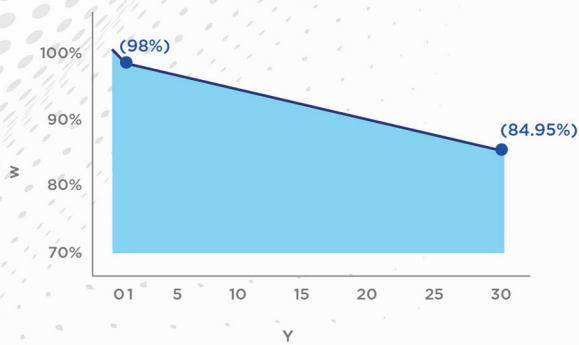
0~+5W
POSITIVE POWER TOLERANCE

2% FIRST YEAR POWER DEGRADATION

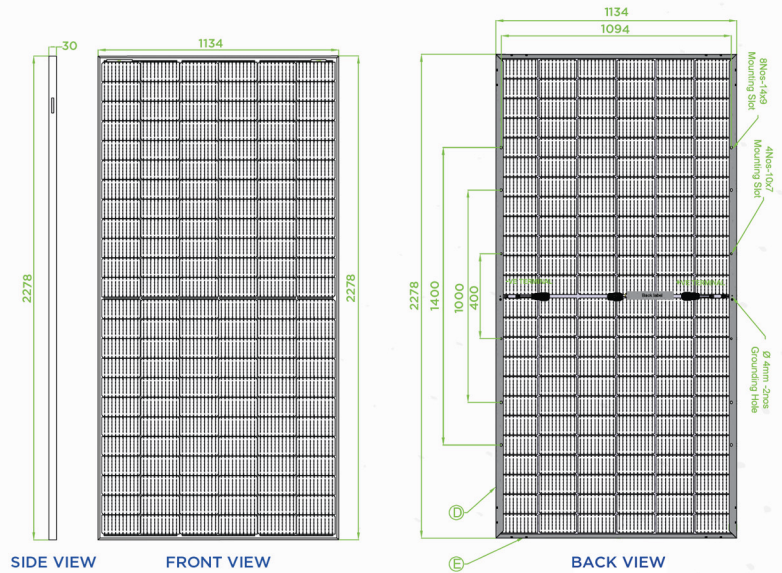
0.45% SUBSEQUENT ANNUAL POWER DEGRADATION

GUARANTEED POWER

30-year power warranty



* Please refer to the Warranty Document for details.



ELECTRICAL DATA

Electrical Data (STC)

Peak Power - P_{MAX} (Wp)*	530	535	540	545	550
Power Tolerance - P_{MAX} (W)	0 ~ +5				
Max Power Voltage - V_{MPP} (V)	40.53	40.61	40.66	40.79	40.90
Max Power Current - I_{MPP} (A)	13.08	13.18	13.29	13.37	13.45
Open Circuit Voltage - V_{OC} (V)	49.48	49.55	49.68	49.71	49.74
Short Circuit Current - I_{SC} (A)	13.71	13.79	13.85	13.94	14.03
Module Efficiency - η_m (%)	20.52	20.71	20.90	21.10	21.29

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: $\pm 3\%$.

Electrical Data (NOCT)

Maximum Power - P_{MAX} (Wp)	397	401	405	409	412
Maximum Power Voltage - V_{MPP} (V)	37.80	37.91	38.08	38.16	38.22
Maximum Power Current - I_{MPP} (A)	10.51	10.58	10.64	10.71	10.78
Open Circuit Voltage - V_{OC} (V)	46.16	46.21	46.33	46.35	46.37
Short Circuit Current - I_{SC} (A)	11.10	11.17	11.22	11.29	11.37

MECHANICAL DATA

Solar Cells	Bifacial Mono PERC
No. of cells	144 Half cut
Module Dimensions	2278 × 1134 × 30 mm
Weight	32.5 kg
Front Glass	2mm, High Transmission glass, Tempered ARC glass
Encapsulant	EPE / EVA
Rear Cover	2mm, High Transmission glass
Frame	30mm, Anodized Aluminum
Junction Box	IP68 / IP67
Cable*	4.0 mm ² , Cable length 300mm (Positive and Negative)
Connector*	MC4/ MC4 compatible

*Please connect with the sales team for final connector details.

^ Cable length can be customised.

Temperature rating

NOCT	43°C $\pm 2^\circ\text{C}$
Temperature Coefficient of P_{MAX}	- 0.32%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.06%/°C
Max Series Fuse rating	30A

WARRANTY

12-year Product Workmanship Warranty
30-year Power Warranty
2% first year degradation
0.45% Annual Power Attenuation

PACKING CONFIGURATION

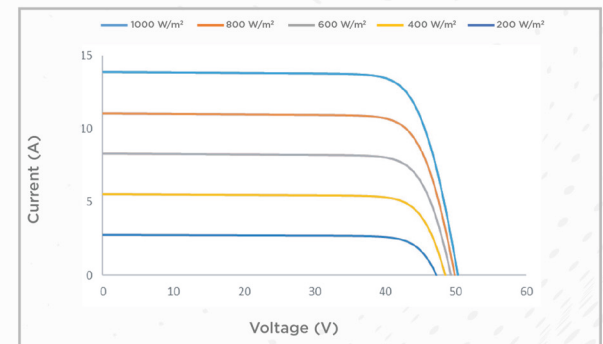
Modules per box: 36 pieces
Modules per 40' HC container: 720 pieces

FRAME DETAILS (D)

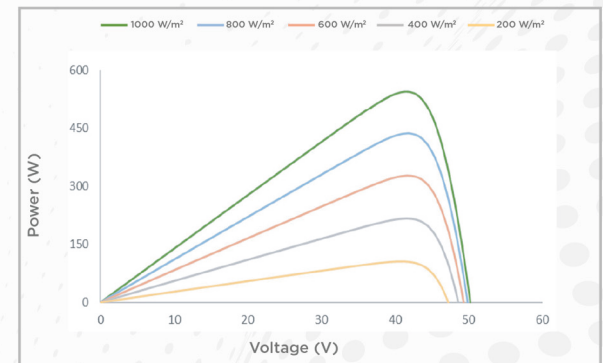
All dimensions are in mm

FRAME DETAILS (E)

IV Curve



PV Curve



CAUTION:
READ SAFETY AND INSTALLATION INSTRUCTIONS
BEFORE USING THE PRODUCT.

Specifications included in this datasheet are subject to change without notice.

TRANSFORMING THE POWER OF SUN



NEXT GEN TOPCON BIFACIAL SOLAR PV MODULE 585-600 Wp DUAL GLASS

Best in Class Efficiency **23.25%**

High Efficiency **N-Type TOPCon Cells (M10)**
Bifacial Module with Dual Glass

Non-Destructive Cell Cutting (NDC)

FEATURES



Lower LID & Per Year Degradation - Enhanced Power Generation Using TOPCon Technology



Better Rear Power Gain - Higher Bifaciality Factor of 80±5%



Improved Temperature Coefficients as compared to conventional P-Type Technology - Better Generation at Higher Temperature



Half Cut Cell Design - Excellent Performance Under Partial Shading Conditions



Lower LCOE & Faster ROI - Higher Bifaciality, Lower BOS Cost



Excellent Module Performance - Reduced Resistive Loss with MBB Technology



Manufactured in Fully Automatic Production Line - 100% Inline Hi-Pot and EL Testing at 3 Stages



Meeting Highest Quality Standards - Manufactured Using Certified Tier 1 BOM



Excellent Performance Under Low Light - Higher Power Output on Cloudy or Foggy Days



Bifacial gain of **Up To 25% with Dual Glass Module**, capable of energy generation with both direct and reflected sunlight.



Approvals and Certificates :

IEC 61215, IEC 61730 (I & II), IEC 61853, IEC 62804, IEC 60068, IEC 61701, IEC 62716, IEC 63209, IS 14286 (BIS), ISO 9001:2015, 14001:2015, 45001:2018 certified



* Under Process





TOPCON SOLAR PV MODULES WITH DUAL GLASS 585-600Wp

ELECTRICAL DATA - STC* & NOCT**

Model	Unit	JN-585G		JN-590G		JN-595G		JN-600G	
Parameters		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Capacity rating Wp	Pmax	585	442	590	446	595	450	600	454
Max. Power Voltage in V	Vmp	44.09	41.52	44.23	41.65	44.37	41.78	44.52	41.92
Max. Power Current in A	Imp	13.27	10.65	13.34	10.71	13.41	10.76	13.48	10.82
Open Circuit Voltage in V	Voc	52.57	50.01	52.72	50.16	52.88	50.31	53.03	50.45
Short Circuit Current in A	Isc	14.05	11.24	14.10	11.28	14.16	11.33	14.22	11.38
Module Efficiency	%	22.67		22.86		23.05		23.25	
Power Tolerance	Wp	-0/+4.99							

*STC: Irradiance 1000 W/m², cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1. Measurement uncertainty ±3%

**NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec.

BI-FACIAL OUTPUT - REARSIDE POWER GAIN*

		JN-585G	JN-590G	JN-595G	JN-600G
10%	Power Output (W)	644	649	655	660
	Module Efficiency (%)	24.95	25.15	25.38	25.57
15%	Power Output (W)	673	679	684	690
	Module Efficiency (%)	26.08	26.31	26.50	26.73
20%	Power Output (W)	702	708	714	720
	Module Efficiency (%)	27.20	27.43	27.66	27.90
25%	Power Output (W)	731	738	744	750
	Module Efficiency (%)	28.32	28.59	28.83	29.06
Bifaciality Factor		80±5%			

*Bifaciality gain is dependent on various factors (Ground Reflectance, Tilt Angle, Location, etc.)

MECHANICAL DATA

Dimensions (L x W x H)	MM: 2278 x 1133 x 30 IN: 29.68 x 44.60 x 1.18
Weight	32 kgs 70.55 lbs (±3%)
Junction Box	Split JB, IP 68 with 3 bypass diodes
Cable	Solar Cable 4.0 mm ² / 0.006 in ² , 400 mm / 15.75 in (Higher cable option available on request)
Front Superstrate	2.0 mm / 0.079 in, High Transmission, AR coated
Solar Cells	N-Type TOPCon - M10 (144 pcs Half Cut)
Cell Encapsulation	PID & UV Resistant Coextruded (POE)
Back Substrate	2.0 mm / 0.079 in, Heat Strengthened Glass (Optional White Grid)
Frame	Anodized Aluminium Alloy
Mechanical Load Strength	5400 Pa (Snow Load), 2400 Pa (Wind Load)

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	45°C (±2°C)
Temperature Coefficient of Voc(β)	-0.25%/°C
Temperature Coefficient of Isc(α)	0.046%/°C
Temperature Coefficient of Pmax(γ)	-0.30%/°C

PERMISSIBLE OPERATING CONDITIONS

Temperature Range	-40°C to +85°C
Maximum System Voltage	1500 V DC
Max. Series Fuse Rating	30 A

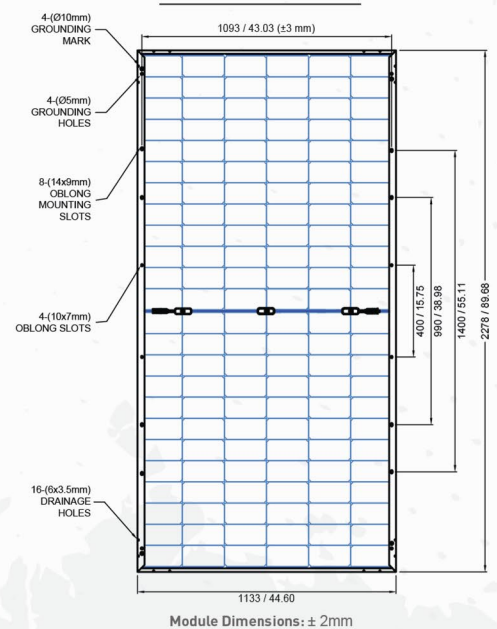
WARRANTY AND CERTIFICATIONS

Product Warranty	12 years Product Warranty
Performance Guarantee	30 year Linear Performance Warranty

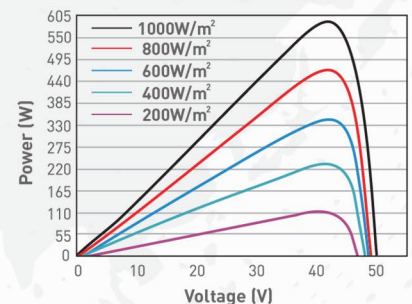
PACKAGING CONFIGURATION

Vehicle Type	32FT	40FT
Module per Pallet Qty Nos	32	32/36
Module per Vehicle Qty Nos	480	704/720

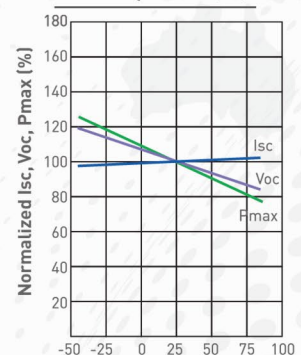
Dimension of PV Module
Unit: mm / in



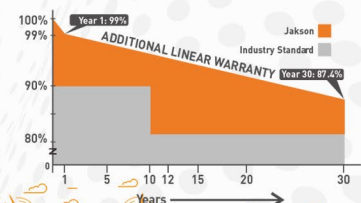
Power-Voltage Curve



Cell Temperature [°C]



Linear Performance Warranty





Next-Gen Energy Storage

Built for Reliability & Performance

JAKSON BESS is an advanced energy storage solution that powers homes and businesses with reliability and intelligence. It stores excess energy for use anytime day or night enhancing energy independence and efficiency.



Compact



Zero
Maintenance



Intelligent
& Safe



Pollution
Free
(Noise & Air)

10kVA



15kVA



3/5kVA



TECHNICAL SPECIFICATIONS

Specifications	3kVA	5kVA	10kVA	15kVA
Input Parameters:				
Input Phase Configuration	1-Phase			3-Phase
Nominal Voltage	230V AC			400V AC
Voltage range	110V ~ 280V AC			175V ~ 270V AC (per phase)
Nominal frequency	50/60 Hz			
Frequency range	±10%			
Output Parameters (Battery mode):				
Output Phase Configuration	1-Phase			3-Phase
Nominal Voltage	230V AC			400V AC
Voltage regulation	±1%			
Nominal frequency	50/60 Hz			
Frequency range	±0.1%			
Efficiency	94%			95%
Switching time	zero			6~10 msec
Special Features:				
LCD Display for monitoring: Input: voltage/frequency/current, Output: voltage/frequency/current/ load (kVA/kW), Battery: voltage/current	Yes			
Protection/Alarm: Short circuit, Output Overload, Over temperature, Input voltage Over/under, DC bus high/low, Battery low, Output voltage over/under	Yes			
Environmental:				
IP rating	IP20			
Operating altitude	0 ~ 1500M (Derating above 1500M; 1% per 100M)			
Operating Temperature & Humidity	0 ~ 50 deg C & 0 ~ 95% RH Non-condensing (Derating above 50 deg C; 1% per Deg C)			
Communication:				
Communication Interface: RS232/USB/EPO (standard) SNMP/ Modbus/Wifi/IoT (Optional)	Yes			
Battery Specification				
Battery voltage	48V DC			
Maximum Discharging/charging current	100 Amps	200 Amps	300 Amps	
Recommended charging current	50 Amps	100 Amps	150 Amps	
Operating temperature	-20 to 60 deg C			
Battery capacity (kWh)	4.8/9.6 kWh	9.6/19.2 kWh	14.4/28.8 kWh	



From 1 AC to Full Home Power – Choose Your Energy Level

How Much Can Your BESS Power?

"Smart Backup for Everyday Living" 3 kVA	"Comfort Without Compromise" 5 kVA	"Power Your Full Lifestyle" 10 kVA	"Total Home Power Freedom" 15 kVA
 1 Air Conditioner	 2 Air Conditioners	 3-4 Air Conditioners	 5-6 Air Conditioners
 LED TV with wifi	 Washing Machine	 Washing Machine	 Washing Machine
 Refrigerator	 Refrigerator	 Smart TV with wifi	 Double-door Refrigerator
 2-3 Fans	 TV with wifi	 Large Refrigerator	 Geyser
 Lights	 Fans + Lights	 Geyser	 Water Pump
 Full lighting		 Full house load	
"Stay cool, connected, and comfortable during outages"	"Run your daily home exactly the way you like"	"Handle bigger homes and heavier usage with ease"	"Everything runs. Nothing stops."

Actual performance depends on battery capacity (kWh), appliance efficiency, and usage.

◆ What is BESS?

BESS is a smart battery system that stores electricity and provides power backup when needed.

◆ What appliances can run on it?

It can run lights, fans, TV, Wi-Fi, fridge, and even ACs (based on system size).

◆ What backup will I get?

Backup ranges from 3 hours to 12+ hours depending on battery capacity and load.

◆ Is it worth installing a BESS for my home or business?

Yes, it ensures uninterrupted power & gives energy independence, making it a smart long-term investment.



Since
1947

 **JAKSON**



JAKSON GENSET 5kVA

Specification



Powering Your Essentials

- | | |
|-------------------|------------------------|
| 1 Air Conditioner | Set-top box / speakers |
| 8 LED lights | Refrigerator |
| 4-6 Ceiling Fans | Mixer grinder |
| Mobile chargers | Washing machine |
| Wi-Fi router | Water pump (0.5-1 HP)* |
| Laptop / desktop | Microwave oven* |
| Television | |

*Actual performance depends on appliance efficiency and usage.

Genset	
Model	SP-IV 5 kVA
Rating (KVA)	5
No. of Phase	Single
Controller	DEIF
Size (L X W X H) - (mm)	1000 x 600 x 855
Fuel Tank Capacity (Ltr.)	13
Approximate Weight (kg)	225

Engine	
Make	KD441 GSI4
Power (kW)	6.1
Bore	86MM
Stroke	76MM
RPM	3000
Cooling	Air Cooled
Aspiration	Natural
No. Of Cylinders	1
Displacement (cc)	442
Governing Class	A2
Starting System	12 V DC
Battery (Ah)	35
SFC (g/kWh)	245
Oil Capacity (Liter)	1.5

Alternator	
Make	NSM
Voltage (Volts)	230
Phase	Single
Frequency (Hz)	50

Power Wherever You Need It



Bungalows



Small Offices



Small Shops



Camp Sites



Boat House



ATM Booth





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