

SOLAR POWER PACKS OFF-GRID SYSTEMS

(150Wp-10kWp:Single Phase)



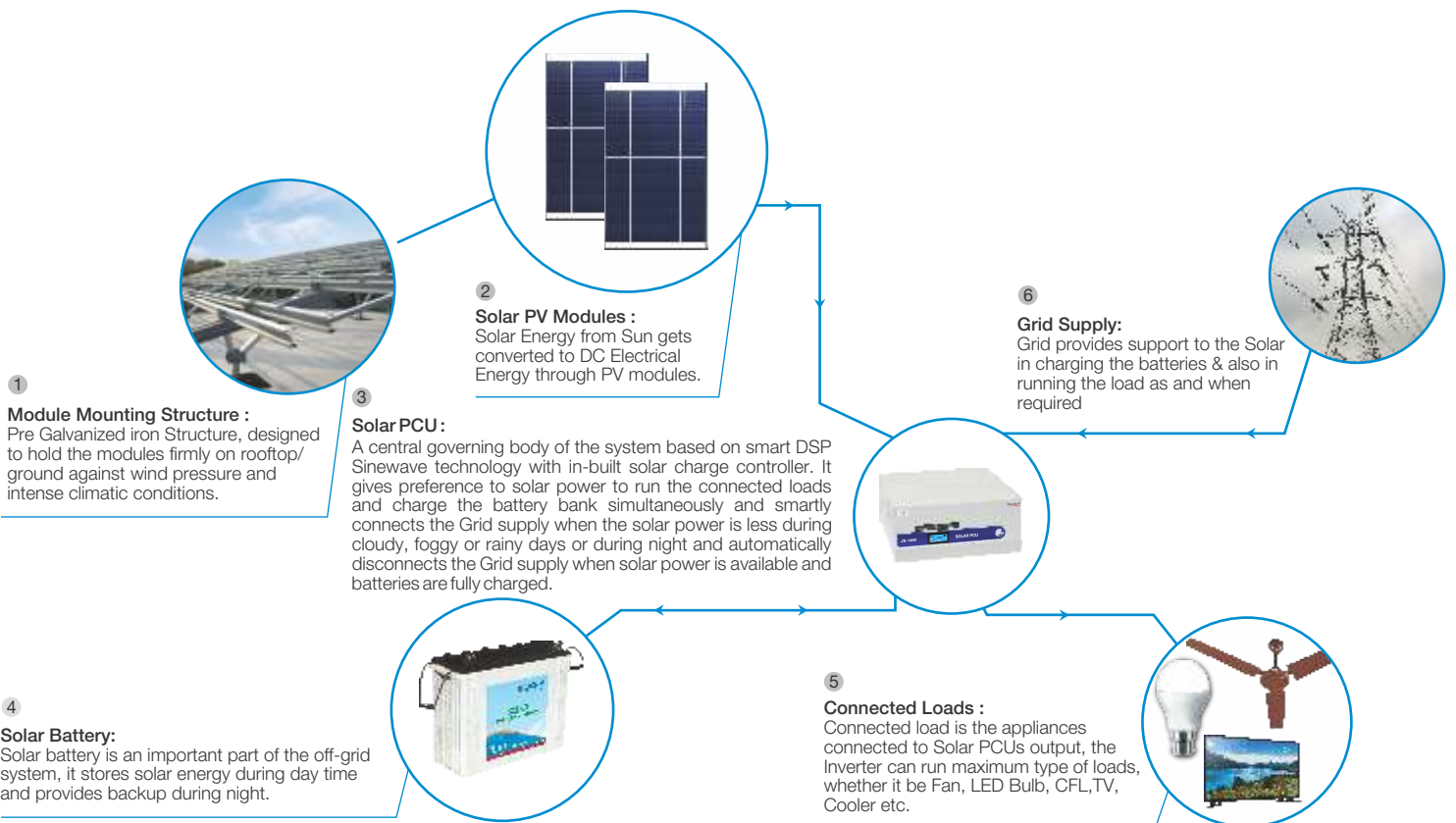
Get 4-5 hrs. of backup on recommended load

Reduce dependence on DG - save fuel & money

Generate your own electricity for 25 years & more

Make your idle roof a source of earning

Jakson Off-Grid Solar Power Packs are an ideal solution for areas having no electricity supply. These self-sustaining solar powered panels can provide clean energy for residential homes and reduce dependence on DG sets thereby saving fuel costs. Our Off-Grid Solar Power Packs are low in maintenance and have a long life of upto 25 years or more



SOLAR POWER PACKS – OFF-GRID SYSTEMS

TECHNICAL SPECIFICATIONS & FEATURES OF THE SYSTEM – 12 VOLT SERIES



Solar Power Pack Rating	150 Wp - Single Phase	200 Wp - Single Phase	250 Wp - Single Phase
Model No.	J-OGS-0.15-0.85-12-100	J-OGS-0.2-0.85-12-100	J-OGS-0.25-0.85-12-150

COMPONENTS

SOLAR PCU

Capacity (VA)	850 / 1000*	850 / 1000*	850 / 1000*
DC Voltage (V)	12	12	12
Technology	DSP based Pure Sinewave Inverter with inbuilt PWM charge controller		

SOLAR PV MODULE

PV Rating (Wp)	150	200	250
Module Rating (Wp) / Qty.(Nos.)	150/1	200/1	250/1
Module Voltage (V)	12	12	12
Expansion in PV Capacity (+ N)**	+2	+2	+2

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	100/12	100/12	150/12
Type	Tubular-LMLA C-10 Rated		
Quantity (Nos.)	1	1	1
Battery Charging through SOLAR in one day***	45%	61%	51%
Battery Charging through GRID in one day	55%	39%	49%

RECOMMENDED LOAD (WATTS)

CFL / LED Load 15W (Qty.-Nos.)	2	2	2
TUBE LIGHT Load 40W (Qty.-Nos.)	1	1	1
FAN Load 70W (Qty.-Nos.)	1	1	1
LED/LCD TV Load 80W (Qty.-Nos.)	0	0	1
LAPTOP Chg. Load 65W (Qty.-Nos.)	0	0	1
MOBILE Chg. Load 5W (Qty.-Nos.)	2	2	2

TECHNICAL SPECIFICATIONS & FEATURES OF THE SYSTEM – 24 VOLT SERIES

Solar Power Package	500 Wp - Single Phase	750 Wp - Single Phase	900 Wp - Single Phase	1000 Wp - Single Phase
Model No.	J-OGS-0.5-1.45-24-150	J-OGS-0.75-1.45-24-150	J-OGS-0.9-1.45-24-200	J-OGS-1.0-2.0-24-200

COMPONENTS

SOLAR PCU

Capacity (VA)	1450	1450	1450	2000
DC Voltage (V)	24	24	24	24
Technology	DSP based Pure Sinewave Inverter with inbuilt PWM charge controller			

SOLAR PV MODULE

PV Rating (Wp)	500	750	900	1000
Module Rating (Wp) / Qty.(Nos.)	250 / 2	250 / 3	300 / 3	250 / 4
Module Voltage (V)	24	24	24	24
Expansion in PV Capacity (+ N)**	+1	0	0	0
Connection Combination (Series - Parallel)	2 (P)	3 (P)	3 (P)	4 (P)

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	150 / 12	150 / 12	200 / 12	200 / 12
Type	Tubular-LMLA C-10 Rated			
Quantity (Nos.)	2	2	2	2
Connection Combination (Series - Parallel)	2 (S)	2 (S)	2 (S)	2 (S)
Battery Charging through SOLAR in one day***	51%	76%	68%	76%
Battery Charging through GRID in one day	49%	24%	32%	24%

RECOMMENDED LOAD (WATTS)

CFL / LED Load 15W (Qty.-Nos.)	5	6	6	8
TUBE LIGHT Load 40W (Qty.-Nos.)	2	3	3	5
FAN Load 70W (Qty.-Nos.)	2	3	4	4
LED/LCD TV Load 80W (Qty.-Nos.)	1	1	1	1
LAPTOP Chg. Load 65W (Qty.-Nos.)	1	1	2	3

*Model available on special request

**N Stands for number of PV modules which can be attached as a surplus quantity.

SOLAR POWER PACKS – OFF-GRID SYSTEMS

TECHNICAL SPECIFICATIONS & FEATURES OF THE SYSTEM – 48 VOLT SERIES

Solar Power Pack Rating	1500 Wp - Single Phase	2000 Wp - Single Phase	2500 Wp - Single Phase
Model No.	J-OGS-1.5-2.5-48-150	J-OGS-2.0-2.5-48-200	J-OGS-2.5-2.5-48-300

COMPONENTS

SOLAR PCU

Capacity (VA)	2500	2500	2500
DC Voltage (V)	48	48	48
Technology	DSP based Pure Sinewave Inverter with inbuilt PWM charge controller		

SOLAR PV MODULE

PV Rating (Wp)	1500	2000	2500
Module Rating (Wp) / Qty.(Nos.)	250/6	250/8	250/10
Module Voltage (V)	24	24	24
Connection Combination (Series-Parallel)	2(S)-3(P)	2(S)-4(P)	2(S)-5(P)

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	150/12	200/12	150/12
Type	Tubular-LMLA C-10 Rated		
Quantity (Nos.)	4	4	8
Connection Combination (Series-Parallel)	4(S)	4(S)	4(S)-2(P)
Battery Charging through SOLAR in one day***	76%	76%	63%
Battery Charging through GRID in one day	24%	24%	37%

RECOMMENDED LOAD (WATTS)#

CFL / LED Lamps 15W (Qty.-Nos.)	10	10	10
Ceiling Fan 70W (Qty.-Nos.)	6	8	8
LED/LCD TV 80W (Qty.-Nos.)	3	4	4
FRIDGE 185 ltr. 175W (Qty. - Nos.)	1	2	2
Air Cooler 180W (Qty. - Nos.)	1	1	2

Solar Power Pack Rating	3000 Wp - Single Phase	3500 Wp - Single Phase	2500 Wp - Single Phase
Model No.	J-OGS-3.0-3.5-48-300	J-OGS-3.5-3.5-48-450	J-OGS-2.5-5.0-48-300

COMPONENTS

SOLAR PCU

Capacity (VA)	3500	3500	5000
DC Voltage (V)	48	48	48
Technology	DSP based Pure Sinewave Inverter with inbuilt PWM charge controller		

SOLAR PV MODULE

PV Rating (Wp)	3000	3500	2500
Module Rating (Wp) / Qty.(Nos.)	250/12	250/14	250/10
Module Voltage (V)	24	24	24
Connection Combination (Series-Parallel)	2(S)-6(P)	2(S)-7(P)	2(S)-5(P)

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	150/12	150/12	150/12
Type	Tubular-LMLA C-10 Rated		
Quantity (Nos.)	8	12	8
Connection Combination (Series-Parallel)	4(S)-2(P)	4(S)-3(P)	4(S)-2(P)
Battery Charging through SOLAR in one day***	76%	59%	63%
Battery Charging through GRID in one day	24%	41%	37%

RECOMMENDED LOAD (WATTS)#

CFL / LED Lamps 15W (Qty.-Nos.)	15	15	15
Ceiling Fan 70W (Qty.-Nos.)	9	9	9
LED/LCD TV 80W (Qty.-Nos.)	5	5	5
FRIDGE 185 ltr. 175W (Qty. - Nos.)	2	3	3
Air Cooler 180W (Qty. - Nos.)	2	3	4

*** May vary on availability of solar energy, weather and battery conditions.

#Above table is only for indication, battery backup will change with increase/decrease in load wattage

SOLAR POWER PACKS – OFF-GRID SYSTEMS

TECHNICAL SPECIFICATIONS & FEATURES OF THE SYSTEM – 96 VOLT TO 192 VOLTS SERIES



Solar Power Pack Rating	4000 Wp - Single Phase	5000 Wp - Single Phase	6250 Wp - Single Phase
Model No.	J-OGS-4.0-5.0-96-200	J-OGS-5.0-5.0-96-300	J-OGS-6.2-7.5-120-300

COMPONENTS

SOLAR PCU

Capacity (VA)	5000	5000	7500
DC Voltage (V)	96	96	120
Technology	DSP based Pure Sinewave Inverter with inbuilt PWM charge controller		

SOLAR PV MODULE

PV Rating (Wp)	4000	5000	6250
Module Rating (Wp) / Qty.(Nos.)	250/16	250/20	250/25
Module Voltage (V)	24	24	24
Connection Combination (Series-Parallel)	4(S)-4(P)	4(S)-5(P)	5(S)-5(P)

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	200/12	150/12	150/12
Type	Tubular-LMLA C-10 Rated		
Quantity (Nos.)	8	16	20
Connection Combination (Series-Parallel)	8(S)	8(S)-2(P)	10(S)-2(P)
Battery Charging through SOLAR in one day***	76%	63%	63%
Battery Charging through GRID in one day	24%	37%	37%

RECOMMENDED LOAD (WATTS)#

CFL / LED Lamps 15W (Qty.-Nos.)	15	15	15
Ceiling Fan 70W (Qty.-Nos.)	5	8	10
LED/LCD TV 80W (Qty.-Nos.)	2	4	5
FRIDGE 185 ltr. 175W (Qty. - Nos.)	1	2	3
Air Cooler 180W (Qty. - Nos.)	0	2	4
Air Conditioner 1800W (Qty. - Nos.)	1	1	1

Solar Power Pack Rating	7500 Wp - Single Phase	8000 Wp - Single Phase	10000 Wp - Single Phase
Model No.	J-OGS-7.5-7.5-120-300	J-OGS-8.0-10.0-192-200	J-OGS-10.0-10.0-192-300

COMPONENTS

SOLAR PCU

Capacity (VA)	7500	10000	10000
DC Voltage (V)	120	192	192
Technology	DSP based Pure Sinewave Inverter with inbuilt PWM charge controller		

SOLAR PV MODULE

PV Rating (Wp)	7500	8000	10000
Module Rating (Wp) / Qty.(Nos.)	250/30	250/32	250/40
Module Voltage (V)	24	24	24
Connection Combination (Series-Parallel)	5(S)-6(P)	8(S)-4(P)	8(S)-5(P)

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	150/12	200/12	150/12
Type	Tubular-LMLA C-10 Rated		
Quantity (Nos.)	20	16	32
Connection Combination (Series-Parallel)	10(S)-2(P)	16(S)	16(S)-2(P)
Battery Charging through SOLAR in one day***	76%	76%	63%
Battery Charging through GRID in one day	24%	24%	37%

RECOMMENDED LOAD (WATTS)#

CFL / LED Lamps 15W (Qty.-Nos.)	18	18	18
Ceiling Fan 70W (Qty.-Nos.)	10	12	15
LED/LCD TV 80W (Qty.-Nos.)	5	5	6
FRIDGE 185 ltr. 175W (Qty.-Nos.)	3	2	2
Air Cooler 180W (Qty.-Nos.)	5	2	2
Air Conditioner 1800W (Qty.-Nos.)	1	2	2

- Technical specifications are subject to change without prior notice.
- Images shown are indicative. Actual product may vary

SOLAR POWER PACKS – OFF-GRID SYSTEMS

TECHNICAL SPECIFICATIONS & FEATURES OF THE SYSTEM
96 VOLT TO 120 VOLTS SERIES (MPPT Series)



Solar Power Pack Rating	5000 VA-5000 Wp	8000 VA-8000 Wp	10000 VA-10000 Wp
Model No.	JS-OGS-M-5.0-96-300	JS-OGS-M-8.0-120-300	JS-OGS-M-10.0-120-400

COMPONENTS

SOLAR PCU

Capacity (VA)	5000	8000	10000
DC Voltage (V)	96	120	120
Technology	DSP based field programmable sine wave inverter with inbuilt MPPT Charge Controller		
MPPT Operating Voltage Range	100-290	125-320	125-320

SOLAR PV MODULE

PV Rating (Wp)	5000	8000	10000
Module Rating (Wp) / Qty.(Nos.)	250/20	250/32	250/40
Module Voltage (V)	24	24	24
Connection Combination (Series-Parallel)	5(S)-4(P)	8(S)-4(P)	8(S)-5(P)

SOLAR BATTERY

Capacity (Ah) / Voltage (V)	150/12	150/12	200/12
Type	Tubular-LMLA C-10 Rated		
Quantity (Nos.)	16	20	20
Connection Combination (Series-Parallel)	8(S)-2(P)	10(S)-2(P)	10(S)-2(P)
Battery Charging through SOLAR in one day***	65	80	75
Battery Charging through GRID in one day	35	20	25

RECOMMENDED LOAD (WATTS)#

CFL / LED Lamps 15W (Qty.-Nos.)	15	18	18
Ceiling Fan 70W (Qty.-Nos.)	8	12	15
LED/LCD TV 80W (Qty.-Nos.)	4	5	6
FRIDGE 185 ltr. 175W (Qty. - Nos.)	2	2	2
Air Cooler 180W (Qty. - Nos.)	2	2	2
Air conditioner 1800W (Qty.-Nos.)	1	2	2

**Better
Generation
Output**

**Option
of Remote
Monitoring**

**IEC
Certified
PCU**

**Field
Programable
System**

Features of MPPT Based PCU

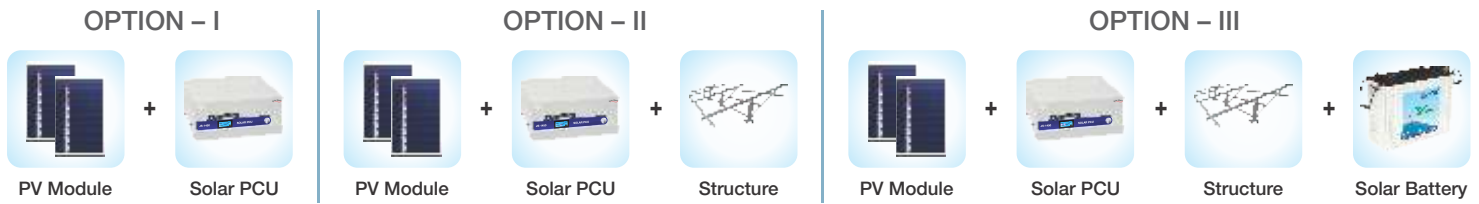
- Produces 30% more energy than conventional PCUs.
- Bigger display for data acquisition.
- Designed as per IEC 61683 and IEC 60068 and MNRE requirement.
- Facility of field programming to adjust the system as per site conditions.
- PV # Grid # Battery priority is also field settable.
- Provision of Battery temperature compensation provided.
- Option of Hybrid PCU also available on request. ♦
- Ability to work with DG Supply (Electronic Governor)
- Option of Remote Monitoring available. ♦♦

♦ Hybrid PCUs are the PCUs which can feed power back into grid.

♦♦ Option of remote monitoring is available on request and at extra cost.

SOLAR POWER PACKS OFF-GRID SYSTEMS

OPTIONS AVAILABLE



**Other Balance of Items like wires etc. Will be available on request with Option III.

SYSTEM COMPONENTS

PV MODULES

- Superior Quality modules, developed as per international benchmarks.
- Manufactured in the state of art facility located at Greater Noida (UP), conforming to relevant IEC standards.
- Sand & Dust Storm Resistant, ensures long life.
- Good quality tempered glass with Anti - reflective coating improves light transmission.
- Excellent performance in low light ensures better output.
- High Efficiency modules ensures better yield.
- 5 years of manufacturing & 25 Years of Limited Power Output Warranty. ♦

Solar PCU (Power Conditioning Unit)

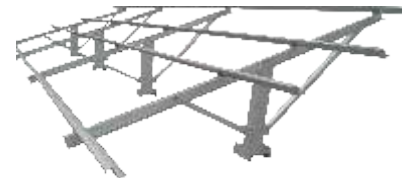
- DSP based pure sine wave output ensures better power quality .
- In Built solar charge controller for optimized solar generation.
- Solar PCU load running priority: Solar-Grid-Battery
- Dual charging mode- Normal charging & High charging.
- Minimum losses and better output regulation due to adequate design of Copper transformer.
- IP21 Enclosure suitable for indoor use.
- Embedded with all standard protections, ensures safety against electrical hazard.
- Wide temperature range from -10°C to 50°C enables working in all parts of the country.
- 2 Years of Manufacturing Warranty. ♦

MODULE MOUNTING STRUCTURE

- Superior Quality Pre - Galvanized material used for longer life.
- Strong mechanical strength which is capable of handling wind speed of up to 150km/hr.
- Pre-galvanized sheets makes the manufacturing process fast, providing uniform finishing.
- Good quality rust free hardware ensure better structural life.
- 10 Years of Manufacturing Warranty. ♦

SOLAR BATTERIES

- Superior Quality, flooded Low maintenance Lead Acid batteries specially designed for Solar.
- Safe, robust and reliable C 10 batteries, designed as per IEC Standard.
- Micro porous vent plugs filters out the gases, trapping the water ,it requires less topping up.
- High Ampere hour efficiency of >90% ensures better performance & extra backup.
- Good quality Antimony Lead Alloy, prevent corrosion and oxidation of terminals.
- Better life due to less self discharge percentage, which is <3% / month @ 27°C.
- 3 Years of Manufacturing Warranty ♦ (5 years Warranty also available on request) .



APPLICATION



SCHOOL / COLLEGES



HOME & OFFICE



PETROL PUMPS



HOSPITALS

♦ Warranty shall be provided to original buyer of the product from the company/company's authorized channel partner / System Integrator/Dealer. Warranty shall be void in case of improper handling/installation or operation and maintenance is not done as recommended or the product is serviced by unauthorized person.

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