



solarising the nation



www.dantarasolar.com

Introduction

ABOUT US

Dantara Enterprise is under the umbrella of **'Dantara Group'**, which has a rich history of more than 30 years for developing and manufacturing wide range of impressive & quality jewellery products. The company has multiple branch offices across PAN India with the strength of more than 200 working employees. The company has established itself as top jewellery manufacturer & exporter of precious jewellery.

Dantara Enterprise is glad to introduce, India's premier solar panel manufacturer "Citizen Solar", as its exclusive business partner for Maharashtra state. With strong focus on the fact that the most abundant energy source on mother earth is solar energy, we are dedicated towards providing complete range of solar solutions to our customers. We believe to deliver cost effective, better quality & highly efficient sustainable energy products & thus enabling future of clean & green energy.

We provide one stop solution for the site visit, project commencing & giving effective after sales service to our customers. We cater to the residential, commercial as well as industrial areas.

Dantara Enterprise has its office at a strategic location in Mumbai, which is business capital of India. We believe in obtaining high customer satisfaction by providing high quality products and 24 x 7 customer support.

ABOUT CITIZEN SOLAR

Citizen Solar Private Limited is a part of 27 years old **Citizen Group**, an **ISO 9001-14001 & SMERA** rated Company is one of the India's top solar panel manufacturers dealing with technologically astute and cutting edge solutions for industrial and business use. Equipped with world class machinery and industry leading infrastructure, its headquarters are based at Ahmedabad.

Citizen Solar's state-of-the-art manufacturing facility is located at Chatral Industrial Area Gujarat, having been spread over a massive 45,000 square feet, capable of consistently producing 60 MW energy per annum with scalable upto 180 MW.

Citizen Solar is one of the preferred EPC service providers in the Indian Market. The Company has successfully established its name in the market place due to totally automated module production, highly innovative core technology and comprehensive & strict quality management system.



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CHOOSING US IS CHOOSING SUPERIOR QUALITY





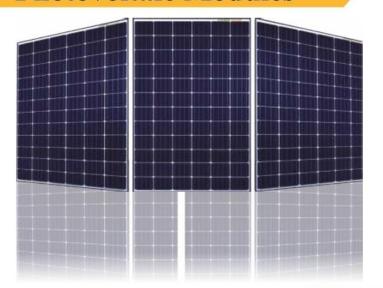








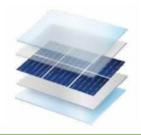
Photovoltaic Modules





CSP 3W-315W

We are dedicated to produce and provide highly efficient mono / polycrystalline photovoltaic modules that guarantees longevity to the limits & beyond. We follow stringent protocols and policies prioritizing customer satisfaction all the way with the help of extensive Quality Assurance measures. Even after completion of the Manufacturing process, our team of vastly experienced domain experts indulge in rigorous testing and analysis spread across various levels. We produce solar PV modules (Photovoltaic) from 3 Wp to 325 Wp via Multi-Crystalline Solar Cells (Made of Silicon) and other core materials having been sourced from some of the most reputed suppliers in the world.



EVA Clear

EVA White

SOLAR MODULE FEATURES

HIGHER OUTPUT OF MODULE POWER by reducing cell to module power loss

Designed for very HIGH AREA EFFICIENCY ideally suited for roof-top and ground-mounted applications

Up to +2.5 Wp POSITIVE POWER OUTPUT TOLERANCE GUARANTEED ensuring better ROI

Extremely RELIABLE PRODUCT suiting all environment conditions

Engineered to provide EXCELLENT LOW LIGHT RESPONSE

Extremely NARROW POWER BINNING TOLERANCE to reduce current mismatch loss in single string

QUALITYAND SAFETY

- 25 years of linear power output warranty **
- Rigorous quality control meeting the highest international standards
- 100% EL tested to ensure micro crack free modules
- · Certiied for PID resistance
- Certiied for salt mist corrosion resistance –severity VI
- Certiied for ammonia resistance
- Compatible with K2, HILTI & Schletter structures for short and long side clamping*
- 3rd Party PAN ile validated by PVEL*

APPLICATIONS

- · On-grid large scale utility systems
- On-grid rooftop residential, commercial and industrial roof top installations
- · Off-grid residential systems
- Solar pumping applications









72 CELL SERIES

CS 72 CELL MODULE TYPE: CS 295~315 Watt

Electrical Data: All Data refers to STC (1000W/m2, AM1.5G, 25°C)

Туре	CS 295 P	CS 300 P	CS 305 P	CS 310 P	CS 315 P	CS 320 P	CS 325 P
Peak Power (0-4.99Wp) Pmax (Wp)	295	300	305	310	315	320	325
Maximum Voltage Vmpp(V)	37.21	37.28	37.82	38.11	38.33	37.70	37.80
MaximumCurrent Impp(A)	7.93	8.05	8.08	8.14	8.22	8.50	8.60
Open Circuit Voltage Voc (V)	44.55	45.10	45.45	45.72	46.04	46.00	46.20
Short Circuit Current Isc (A)	8.69	8.74	8.79	8.81	8.85	9.03	9.13
Module Effciency (%)	15.16	15.41	15.67	15.93	16.18	16.44	16.70

STC:1000W/m2 irradiance ,25°C cell temperature ,AM1.5G spectrum according to EN 60904-3
Average relative effciency reduction of<5% at 200W/m2 according to EN 60904-1

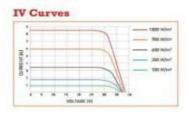
Electrical Parameters at NOCT

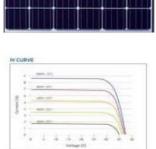
Туре	CS 295 P	CS 300 P	CS 305 P	CS 310 P	CS 315 P	CS 320 P	CS 325 P
Maximum Power Pmax (Wp)	216.3	220.19	223.7	227.3	231.18	234.6	238.3
Maximum Power voltage V@Pmax(V)	33.85	33.98	34.1	34.18	34.3	34.5	34.6
Maximum Powercurrent I@Pmax(A)	6.39	6.48	6.56	6.65	6.74	6.8	6.88
Open Circuit Voltage Voc (V)	42.2	42.26	42.3	42.4	42.5	42.6	42.7
Short circuit current Isc(A)	6.86	6.943	7	7.1	7.18	7.3	7.38

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

Temperature Coeficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (ß)	-0.31%/°c ± 0.02	
Tc of Short Circuit Voltage (α)	0.057%/°c ± 0.01	
Tc of Power	-0.41%/°c ± 0.02	
NOCT	45±2°c	
Maximum Series Fuse Ratings	15 A	
Temerature Range	-40°c to +85 °c	
Maximum System Voltage	1000 V DC	
Limiting Reverse Current (Ir)	15.0 A	

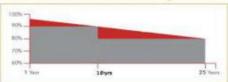




Mechanical Data

Length xWidthxHeight(in mm)	1964mmx991mmx40mm (± 1.5 mm)
Weight	21.50Kg
Junction Box	IP 65 /IP 67 rated with 3 Bypass diodes
Cable & Connectors	4 sqm(12AWG) solar cable 1000mmx2 nos black MC4 compatible connector
Application Class	Class A (Safety class II)
Superrstrate (Glass)	3.2 mm High transmission low iron tempered glass AR coated / non ARC
Solar cells & Orientation	72 No's (12x6) polycrystalline solar cells -3BB & 4BB (156.75x156.75mm)
Cells Encapsulant	EVA (Ethyelene Vinyl Acetate)- FC/UFC
Back Sheet	Composite ilm -White : (Black & Transparent optional)
Frame	Silver Anodized aluminum frame with twin wall proile (Black Optional)
Mechanical Load Test	Sustain Heavey wind & snow loads (2400 Pa & 5400 Pa or 550 Kg/m2 Maximum diameter of 24 mm with Hail impact of 83 Km/h

Performance Warranty



Warranty and Certification

Product Warranty**	5 Years
Performance Warranty**	Guranteed power output 90% warranty for 10 years and 80% for
Approvals and certificates	25 years
	Products: IEC 61215 Ed 2, IEC 61730 ,IEC 61701.CE

Packaging Information

Container	20'GP	
Pallets /Container	10	
Pieces/Container	260	

- ** Refer to Blue Citizen Solar warranty documents for terms and conditions.
- **Specifications included in this datasheet are subject to change without notice, Electrical data without gurantee.

Please conirm your requirement with the company representative while placing your order.

** Black and transparent backsheet and black frame module without IEC certied.

60 CELL SERIES



CS 60 CELL MODULE TYPE: CS 245~265 Watt

Electrical Data: All Data refers to STC (1000W/m2, AM1.5G, 25°C)

Type	CS 245 P	CS 250 P	CS 255 P	CS 260 P	CS 265 P	CS 270 I
Peak Power (0-4.99Wp) Pmax (Wp)	245	250	255	260	265	270
Maximum Voltage Vmpp(V)	30.38	30.58	30.78	30.98	31.18	31.40
MaximumCurrent Impp(A)	8.08	8.18	8.29	8.40	8.50	8.61
Open Circuit Voltage Voc (V)	37.30	37.45	37.60	37.75	37.99	38.20
Short Circuit Current Isc (A)	8.60	8.70	8.82	8.95	9.00	9.08
Module Effciency (%)	15.01	15.32	15.62	15.93	16.24	16.54

STC:1000W/m2 irradiance .25°C cell temperature, AM1.5G spectrum according to EN 60904-3 Average relative effciency reduction of<5% at 200W/m2 according to EN 60904-1

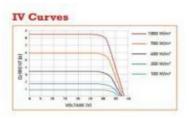
Electrical Parameters at NOCT

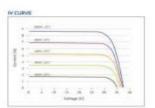
Туре	CS 245 P	CS 250 P	CS 255 P	CS 260 P	CS 265 P	CS 270 P
Maximum Power Pmax (Wp)	183.09	185.97	188.90	192.80	194.70	197.80
Maximum Power voltage V@Pmax(V)	27.60	27.72	27.80	27.90	28.00	28.20
Maximum Powercurrent I@Pmax(A)	6.63	6.71	6.80	6.90	6.97	7.00
Open Circuit Voltage Voc (V)	34.94	35.08	35.10	35.40	35.60	35.70
Short circuit current Isc(A)	6.96	7.04	7.14	7.24	7.28	7.35

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

Temperature Coeficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (ß)	-0.31%/°c ± 0.02	
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NOCT	45±2°c	
Maximum Series Fuse Ratings	15 A	
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Maximum System Voltage	1000 V DC	
Limiting Reverse Current (Ir)	15.0 A	

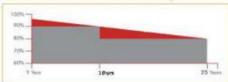




Mechanical Data

Length xWidthxHeight(in mm)	1647mmx991mmx35mm (± 1.5 mm)
Weight	19.00Kg
Junction Box	IP 65 /IP 67 rated with 3 Bypass diodes
Cable & Connectors	4 sqm(12AWG) solar cable 1000mmx2 nos black MC4 compatible connectors
Application Class	Class A (Safety class II)
Superrstrate (Glass)	3.2 mm High transmission low iron tempered glass AR coated / non ARC
Solar cells & Orientation	60 No's (10x6) polycrystalline solar cells - 4BB (156.75x156.75mm)
Cells Encapsulant	EVA (Ethyelene Vinyl Acetate)- FC/UFC
Back Sheet	Composite ilm -White: (Black & Transparent optional)
Frame	Silver Anodized aluminum frame with twin wall proile (Black Optional)
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	Maximum diameter of 24 mm with Hail impact of 83 Km/h

Performance Warranty



Warranty and Certifcation

Product Warranty**	5 Years
Performance Warranty**	Guranteed power output 90% warranty for 10 years and 80% for
Approvals and certificates	25 years
	Products : IEC 61215 Ed 2 , IEC 61730 JEC 61701, CE

Packaging Information

40"HC	
28	
728	
	28

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INVERTER





CONVENIENT & RELIABLE,

CUSTOMER ORIENTED

PRESALES SUPPORT



Tailored Solutions



Specialized Product Consulting



One-on-One Application Coaching



Systematic & Consistent Product Training

AFTER SALES SERVICE

Sufficient Warranty Period

- 60 months standard warranty for On-Grid inverters (from the date of production)
- 24 months standard warranty for Hybrid inverters (from the date of production)
- 24 months standard warranty for accessories (from the date of production)

Replacement Service

- Spare units will be sent to customer for the best benefit of customer
- he remaining warranty
 period of the defective unit will be
 transferred automatically to
 the replacement unit, if a
 replacement occurred within
 warranty

Quick Response Rma (Return Material Authorization) Service

 RMA responses within 3 working days ater on-site inspection is performed

CS SERIES INVERTERS

CS SERIES SINGLE PHASE ON-GRID PV INVERTER (2KW/3KW/4KW/5KW)

- Max eficiency 98.0%, European eficiency 97.2%
- Intelligent MPPT technology with self-studying capability
- Wide input voltage range (70V-580V)
- APP designed for Bluetooth connectivity on smartphone
- · Die-cast aluminum enclosure





CS SERIES THREE PHASE ON-GRID PV INVERTER (6KW/8KW/10KW/12KW/15KW)

- Max eficiency 98.4%, European eficiency 98.0%
- Wide input voltage range(160V-850V)
- 120% over-coniguration capacity, 110% overload capacity
- Die-cast aluminum enclosure
- · Choosing high quality materials
- · Natural convection cooling technology
- One function key to start auto detection and adjustment for on-grid situations
- The lightest PV inverter in the industry with the smallest volume(21.8kg for 15KW)



CS SERIES THREE PHASE ON-GRID PV INVERTER (20KW/30KW)

- Max eficiency 98.8%, European eficiency 98.4%
- Intelligent MPPT technology with self-studying capability
- · Patented ECO mode with high-eficiency
- Integrated DC/AC surge protection
- Natural cooling technology without external fans
- Intelligent monitoring of 6 strings with fast fault detection
- APP designed for Bluetooth connectivity on smartphone



CS SERIES THREE PHASE ON-GRID PV INVERTER (50KW/60KW)

- Max eficiency 99%, European eficiency 98.5%.
- Smart HE (High eficiency) technology
- 120% over-coniguration capacity, 110% overload capacity
- Choosing high quality materials to ensure long using period of whole unit.
- The control system will adjust according to actual situation that there is power or not. Providing "Zero Voltage Ride Through" technology
- · PID module inside
- Auto trouble detection for up to 12 strings
- Remote control and remote irmware upgrade





SOLAR WATER HEATER

ETC SWH SYSTEM



TECHNICAL CONFIGURATION

Thermo Siphon Design With Ultra High Efficient Vacuum Tube Collector

- State of the art engineering design to achieve higher efficiency.
- Easy and user friendly installation.
- Thermo siphon design for easy maintenance.
- Twin tank design.
- Internal tank design is specially designed with SS 304 to prevent rust.
- External tank is having special powder coating to absorb and retain heat.
- Insulation with high density poly urethane Fluorine for high retention of heat of 50mm up to 5 degree in 72hours.
- Anti rust mechanism provision.

 (Option with additional features).
- Electrical heater back up. (Option with additional features).
- Robust foundation base for safety in wind pressure.

THE PARTY OF THE PARTY.

TECHNICAL CONFIGURATION

Thermo Siphon Design With Ultra High Flat plate Collector

FPC SWH SYSTEM

- State of the art engineering design to achieve Higher efficiency.
- Easy and user friendlly installation.
- Thermo siphon design for easy maintenace.

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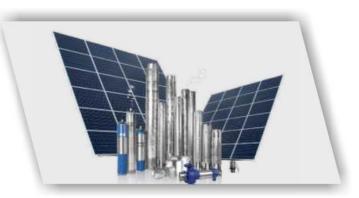
SOLAR WATER PUMP



WHY SOLAR WATER PUMP

A solar - powered pump is a pump running on electricity generated by photovoltaic panels available from collected sunlight as apposed to grid electricity.

The Operation of solar powered pumps is more economical mainly due to the lower operation & maintenance costs & has less environmental impact. solar pumps are useful where grid electricity is unavailable.





BENEFITS

- Compact and Rugged Pumps.
- Easy Priming.
- High Stability.
- No More Fuel Bills.
- Ideal windmill replacement.

TECHNICAL INFORMATION /

Solar Water Pump Capacity	Solar Power	Outlet In Inch	Depth in Mtr.	Water Output/ LPD	Head Range in Meter	Shut Off Head in Meter
з НР	3000 Wp - 3 Phase AC - 230V - 9 Amp - 50 Hz	2.5"	30	102000	20-40	45
5 HP	5000 Wp - 3 Phase AC - 400V - 9 Amp - 50 Hz	2.0"	50	100000	30-65	80
7.5 HP	7000 Wp - 3 Phase AC - 300V - 17.0 Amp - 50 Hz	2.0"	70	95000	50-90	120
10 HP	9400 Wp - 3 Phase AC - 400V - 17.5 Amp - 50 Hz	2.5"	100	98500	70-135	155



SOLAR STREET LIGHT

- Dusk To Dawn Control Unit
- 3 Days Autonomy
- Low Maintenance
- Long Product Life

Technical Specification	12W	15W	18W	24W	30W	36W	40W	55W
Model No.	Cs-12W	Cs-15W	Cs-18W	Cs-24W	Cs-30W	Cs-36W	Cs-40W	Cs-55W
Application	Outdoor							
Luminous Lux	960	1300	1580	1900	2600	3100	3300	4700
Lamp Wattage	12w	15w	18w	24w	30w	36w	40w	55w
Fixture Make	Aluminium Die Casting							
IP Rating	IP 65	IP 66						
Weight (Kg)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
LED Make/LED Type	Citizen							
System Lumen Efficiency	75	75	75	75	75	75	75	75
Dispresion Angle	120 deg							
Color Temperature & CRI	5600- 6500k/>70							
Electrical Date	12VDC/0.94A	12VDC/0.94A	12VDC/0.94A	A12VDC/0.94	12VDC/0.94	A12VDC/0.94A	12VDC/0.94A	12VDC/0.94A
Input (V) & Current (A)	11.29W	15.8W	18.6W	22.5W	31W	31W	31W	39.5W
Output (V) & Current (A)	19.2VDC/0.5A	19.2VDC/0.7A	28.8VDC/0.55A	38.4VDC/0.7A	8.4VDC/0.7A	38.4VDC/0.7A	38.4VDC/0.7A	48VDC/0.7A
Output Power (W)	9.6W	13.44W	15.8W	20.2W	26.88W	26.88W	26.88W	33.57W
Electronic Efficiency	85%	85%	85%	85%	85%	85%	85%	85%









OUTDOOR LIGHTS



Street Light /

- High power leds
- Luminar eficacy of >80im/w
- Pressure Die Cast Aluminium Housing
- In bult power box



Product Code	CS14-30SL	CS14-45SL	CS14-30SL	CS14-30SL	CS14-30SL	CS14-30SL	CS14-30SL
Power Consumption	30W	45W	60W	80W	100W	120W	150W
Replacement : Traditional Fixture	90W	150W	180W	180W	250W	300W	450W
Lumens	2900	4300	5620	7850	9700	9700	14490
Color Temperature	3000K/4000K6500K	3000K/4000K6500K	3000K/4000K6500K	3000K/4000K6500K	3000K/4000K6500K	3000K/4000K6500K	3000K/4000K6500K
Outer size		- A	08 			solid:	0030
Cut-out		As Per Requirement					
Height							
Power Factor	0.9	0.9	0.9	0.9	0.9	0.9	0.9
CRI	>70	>70	>70	>70	>70	>70	>70
Operational Voltage	Ac100to 300v,50Hz	Ac100to 300v,50Hz	Ac100to 300v,50Hz	Ac100to 300v,50Hz	Ac100to 300v,50Hz	Ac100to 300v,50Hz	Ac100to 300v,50Hz

LED FLOOD LIGHTS



- Flicker Free
- Free From mercury & other hazardous materials
- ☼ 0% emission of UV/IR
- Low maintenance costs
- 2 years warranty

SI No.	Details	30W	50W	100W	150W	200W
1	lumens	3600	6000	12000	18000	24000
2	Product Model	CSFL-030	CSFL-030	CSFL-030	CSFL-030	CSFL-030
3	IP Rating	lp65	lp65	lp65	lp65	Ip65
4	Material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
5	Body Color	silver Grey Powder Coated				
6	Color	Color/white warm white				
7	LED Used	EPISTAR	EPISTAR	EPISTAR	EPISTAR	EPISTAR





we conceptualize, design & deliver (Install) world class solar technology to our customer which is efficient & affordable. Our main intent in the EPC space is to provide top end quality services. We will make sure to hand hold the customer throughout the life span of the Solar products delivered by us.





ENGINEERING

We design solar plants with optimum PV output committed to achieve the most affordable leveled cost of electricity in any region of the globe.



PROCUREMENT & PURCHASING

We are able to negotiate and supply bankable technology of key providers and services suitable to the project at the best terms possible.



PRODUCTION

In one of the most advanced production lines in Europe, which is completely automated and robotized, we produce our awarded PV modules and patented R&D+I solutions.



PROJECT MANAGEMENT

From A to Z, we plan the whole process taking care of every detail to guarantee the utmost project completion.



CONSTRUCTION

We manage referenced contractors to build the project, assuring the highest level of quality within the EMI and cost deadlines, in total compliance with local regulations.



COMMISSIONING

We carries out several commissioning tests to make sure that each power plant operates as designed and performs as expected.



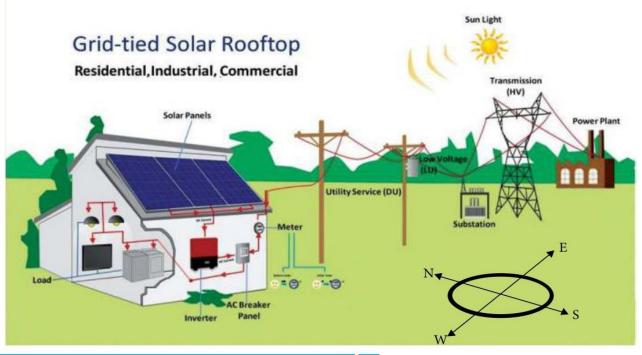
FINANCIAL CONSULTANCY

We design solar plants with optimum PV ROI calculation.

INCOME TAX DEPRECIATION BENEFITS

SOLAR SYSTEM





ON GRID SOLAR SYSTEM

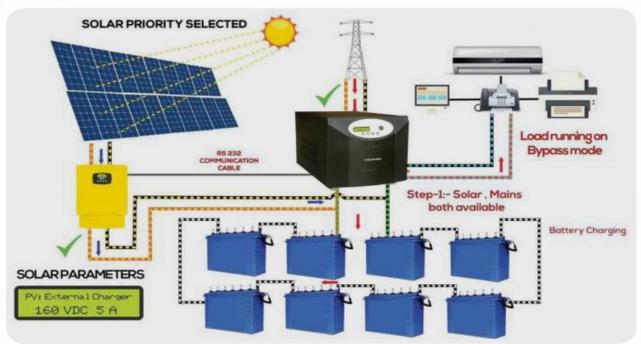
SOLAR PANEL	Solar Panels Convert Sunlight Into Clean Green DC Electricity			
ON GRID INVERTER	Inverter Converts DC Electricity into useable AC Electricity			
GRID SUPPORT	Electricity is imported from the grid and used in the home			
	Customer will have net metering facility- new digital time of use			
NET METER	consumption meter that measures how much power home uses			
	and any excess power your solar power system feeds back to the grid.			
	When the solar system generate excess electricity			
	the excess electricity generated goes			
ExPORTED ELECTRICITY	through the export meter and is sold back to your			
	electricity retailer adding credit to your account.			
COVERNMENT COLEMES	Subsidy for residential roof top solar customers & acclerated			
GOVERNMENT SCHEMES	depereciation for commercial and industrial customers			

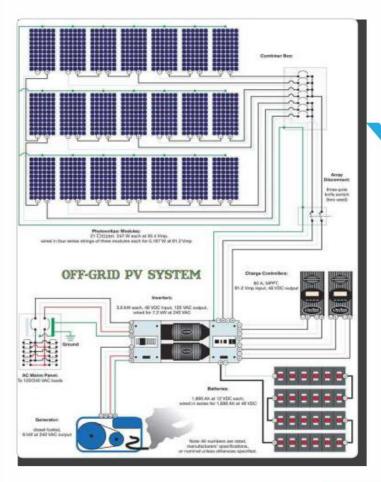






OFF GRID SOLAR SYSTEM





An off-grid solar system (off-the-grid, standalone) is the obvious alternative to one that is grid-tied. To ensure access to electricity at all times, off-grid solar systems require battery storage and a backup generator (if you live off-the-grid). On top of this, a battery bank typically needs to be replaced after 10 years.

Advantages of Off-Grid Solar Systems

1. No access to the utility grid

Off-grid solar systems can be cheaper than extending power lines in certain remote areas where you're more than 100 yards from the grid.It is a gift to mankind lives in rural areas where electricity/grid is not available.

2. Become energy self-suficient

Living off the grid and being self-suficient feels good. For some people, this feeling is worth more than saving money. Energy self-suficiency is also a form of security. Power failures on the utility grid do not affect off-grid solar systems.

On the lip side, batteries can only store a certain amount of energy, and during cloudy times, being connected to the grid is actually where the security is. You should install a backup generator to be prepared for these kinds of situations.

NOTES



DANTARA ENTERPRISE

Address: Unit No. 12, New India Industrial Estate, Off Mahakali Caves Road, Andheri East, Mumbai – 400093 Helpline No: 9872598802 | Email: dantaraenterprise@gmail.com

Citizen Solar Factory: New Survey No. 966, Ankhol to Indrad Road, Kadi-Chhatral Road, At Indrad, Ta. Kadi, Dist. Mehsana, Gujarat - 382715













