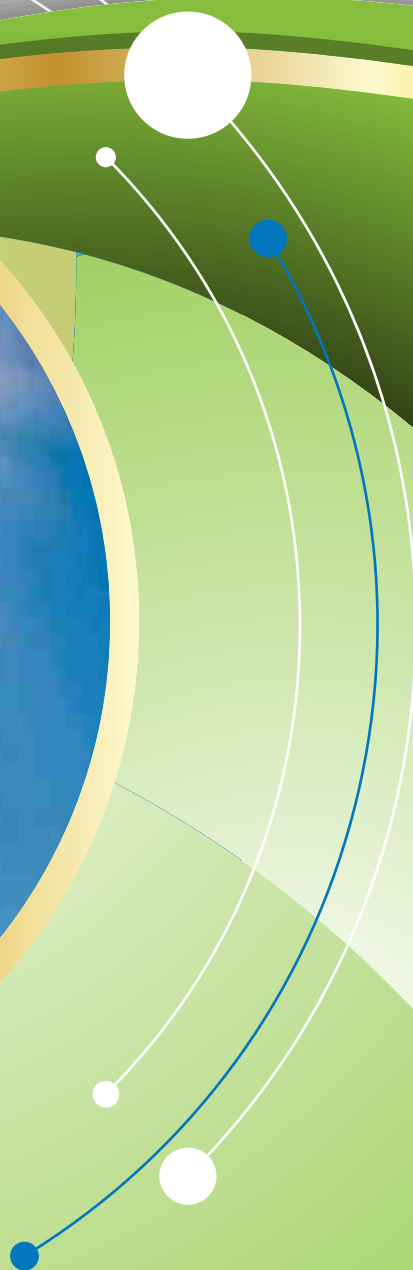




CITIZEN SOLAR
solarising the nation



www.citizensolar.com

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 premier 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 a part of Citizen Group which has a rich history of focusing on developing and manufacturing of various quality products. Citizen Solar Private Limited under the Umbrella of Citizen group Touched Multiple Industries across Different Sectors with a PAN India presence. The Group has successfully catered to

a wide array of industries and businesses spread across multiple verticals such as Textiles, manufacturing and Export, Publishing, Consultancy, Advertising, Real Estate and more.

With a strong focus on the fact that the most abundant energy sources on our mother earth are Solar Energy and Wind Energy, we have come up with 2 state-of-the-art manufacturing facilities for Solar PV Modules and Solar Water Heaters. Citizen Solar comprises of three main divisions that includes Citizen Solar Technology which is a leading solar panel manufacturer with a pan India presence, Citizen Solar Water Heaters that is widely known for their optimum quality Solar Water Heaters available in the market under the same brand name "Citizen" and Citizen EPC to deliver best quality installations through our own in house experienced Engineers and Technicians maintaining high standard Customer friendly Post sale Services.



Mission

Within next 5 years grow Citizen Solar into a preferred choice for Solar Power Products in India and thus creating a value for all the stakeholders & Customers.

Vision

At Citizen Solar, we believe to deliver cost effective, better quality & highly efficient sustainable energy products & thus enabling the future of clean & green energy.

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SOLAR EPC

ON GRID SOLAR SYSTEM

OFF GRID SOLAR SYSTEM

ACCESSORIES

MOUNTING STRUCTURE





CITIZEN SOLAR
high quality

CHOOSING CITIZEN IS CHOOSING SUPERIOR QUALITY



**Highly-Automated
Module Production
Unit**



**Innovative PV
Inverter Core
Technology**



**Elite Teams With
Years Of Industrial
Expertise**



**Comprehensive
& Strict Quality
Management System**



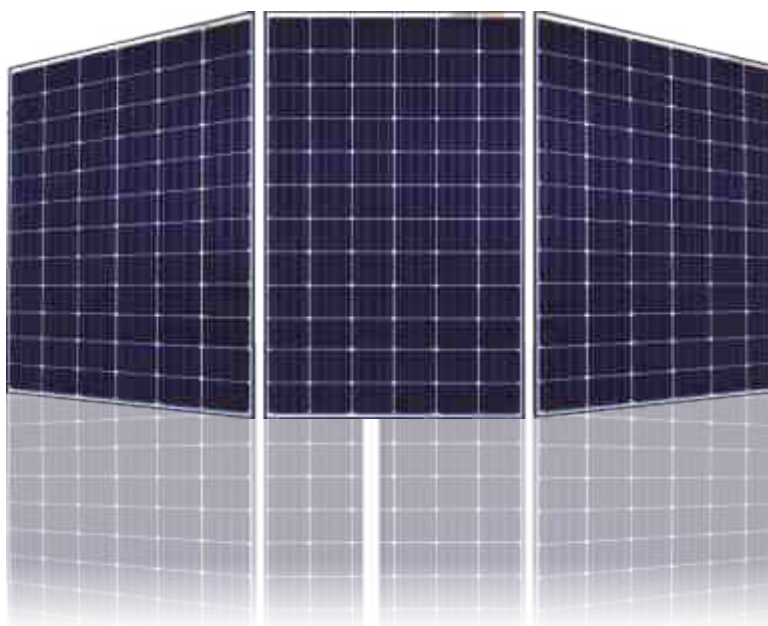
**Strong Support
From The Group**



**Preffered EPC
Service Provider in
The Indian Market**

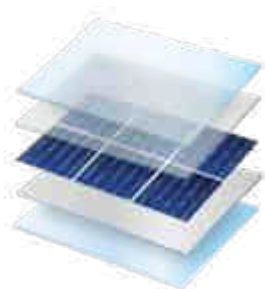


Photovoltaic Modules



CSP 3W-315W

We are dedicated to produce and provide highly efficient mono / polycrystalline photovoltaic modules that guarantees longevity to the limits & beyond. At Citizen Solar, 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

QUALITY AND 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
- Certified for PID resistance

- Certified for salt mist corrosion resistance –severity VI
- Certified 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



CS 72 CELL MODULE TYPE: CS 295~315 Watt

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

Type	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
Maximum Current 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 Efficiency (%)	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 efficiency reduction of<5% at 200W/m² according to EN 60904-1



Electrical Parameters at NOCT

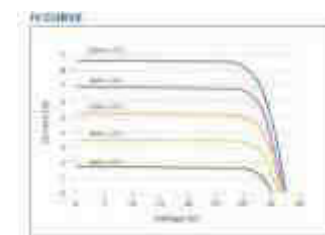
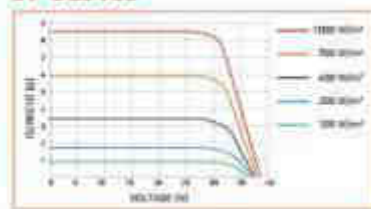
Type	CS 295 P	CS 300 P	CS 305 P	CS 310 P	CS 315 P	CS 320 P	CS 325 P
Maximum Power Pmax (Wp)	216.3	220.19	223.7	227.3	231.18	234.6	238.3
Maximum Power voltage V@Pmax(V)	33.85	33.98	34.1	34.18	34.3	34.5	34.6
Maximum Powercurrent I@Pmax(A)	6.39	6.48	6.56	6.65	6.74	6.8	6.88
Open Circuit Voltage Voc (V)	42.2	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 Coefficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (β)	-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
Temperature Range	-40°C to +85 °C
Maximum System Voltage	1000 V DC
Limiting Reverse Current (Ir)	15.0 A

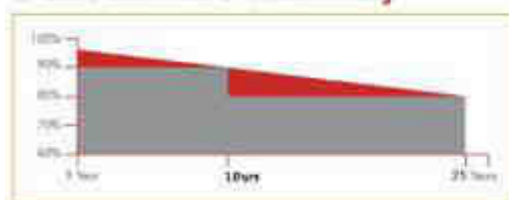
IV Curves



Mechanical Data

Length x Width x Height (in mm)	1964mm x 991mm x 40mm (± 1.5 mm)
Weight	21.50Kg
Junction Box	IP 65 / IP 67 rated with 3 Bypass diodes
Cable & Connectors	4 sqm (12AWG) solar cable 1000mm x 2 nos black MC4 compatible connectors
Application Class	Class A (Safety class II)
Substrate (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 (Ethylene Vinyl Acetate) - FC/UFC
Back Sheet	Composite film - White : (Black & Transparent optional)
Frame	Silver Anodized aluminum frame with twin wall profile (Black Optional)
Mechanical Load Test	Sustain Heavy wind & snow loads (2400 Pa & 5400 Pa or 550 Kg/m ² Maximum diameter of 24 mm with Hail impact of 83 Km/h

Performance Warranty



Warranty and Certification

Product Warranty**	5 Years
Performance Warranty**	Guaranteed power output 90% warranty for 10 years and 80% for 25 years
Approvals and certificates	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 guarantee.

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

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

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 P
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
Maximum Current 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 Efficiency (%)	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 efficiency reduction of <5% at 200W/m² according to EN 60904-1

Electrical Parameters at NOCT

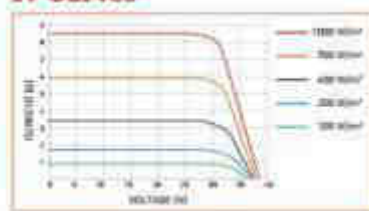
Type	CS 245 P	CS 250 P	CS 255 P	CS 260 P	CS 265 P	CS 270 P
Maximum Power Pmax (Wp)	183.09	185.97	188.90	192.80	194.70	197.80
Maximum Power voltage V@Pmax(V)	27.60	27.72	27.80	27.90	28.00	28.20
Maximum Powercurrent I@Pmax(A)	6.63	6.71	6.80	6.90	6.97	7.00
Open Circuit Voltage Voc (V)	34.94	35.08	35.10	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 800W/m² , ambient temperature 20°C, Wind speed 1m/sec.

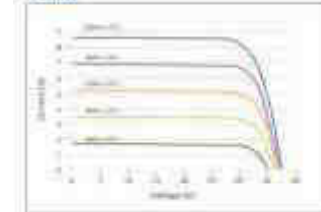
Temperature Coefficients (Tc) permissible operating conditions

Tc of Open Circuit Voltage (β)	-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
Temperature Range	-40°C to +85 °C
Maximum System Voltage	1000 V DC
Limiting Reverse Current (Ir)	15.0 A

IV Curves



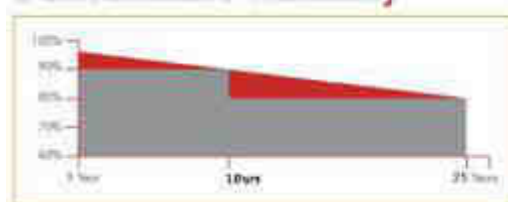
PERFORMANCE



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 (Ethylene 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/m ² Maximum diameter of 24 mm with Hail impact of 83 Km/h

Performance Warranty



Warranty and Certification

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

Packaging Information

Container	40°HC
Pallets /Container	28
Pieces/Container	728

** Refer to Blue Citizen Solar warranty documents for terms and conditions.

**Speciications included in this datasheet are subject to change without notice,Electrical data without guarantee.

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

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



Single Phase For Residence
CS 2KW/3KW/4KW/5KW

Three Phase For Residence
CS 6KW/6KW/10KW/12KW/15KW/20KW/30KW

Three Phase For Commercial And Industry
CS 50KW/60KW

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
- The 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 after on-site inspection is performed

CS SERIES INVERTERS

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

- Max efficiency 98.0%, European efficiency 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 efficiency 98.4%, European efficiency 98.0%
- Wide input voltage range(160V-850V)
- 120% over-configuration 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 efficiency 98.8%, European efficiency 98.4%
- Intelligent MPPT technology with self-studying capability
- Patented ECO mode with high-efficiency
- 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 efficiency 99%, European efficiency 98.5%.
- Smart HE (High efficiency) technology
- 120% over-configuration 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 firmware upgrade



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.



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

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
3 HP	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



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

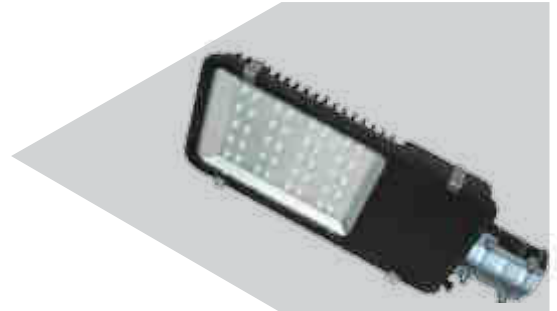
Technical Specification	12W	15W	18W	24W	30W	36W	40W	55W
Model No.	Cs-12W	Cs-15W	Cs-18W	Cs-24W	Cs-30W	Cs-36W	Cs-40W	Cs-55W
Application	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Luminous Lux	960	1300	1580	1900	2600	3100	3300	4700
Lamp Wattage	12w	15w	18w	24w	30w	36w	40w	55w
Fixture Make	Aluminium Die Casting	Aluminium Die Casting	Aluminium Die Casting	Aluminium Die Casting	Aluminium Die Casting	Aluminium Die Casting	Aluminium Die Casting	Aluminium Die Casting
IP Rating	IP 65	IP 66	IP 66	IP 66	IP 66	IP 66	IP 66	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	Citizen	Citizen	Citizen	Citizen	Citizen	Citizen	Citizen
System Lumen Efficiency	75	75	75	75	75	75	75	75
Dispersion Angle	120 deg	120 deg	120 deg	120 deg	120 deg	120 deg	120 deg	120 deg
Color Temperature & CRI	5600-6500k/>70	5600-6500k/>70	5600-6500k/>70	5600-6500k/>70	5600-6500k/>70	5600-6500k/>70	5600-6500k/>70	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 efficacy of >80lm/w
- ☀ Pressure Die Cast Aluminium Housing
- ☀ IP 65
- ☀ In - built power box



Product Code	CS14-30SL	CS14-45SL	CS14-60SL	CS14-80SL	CS14-100SL	CS14-120SL	CS14-150SL
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/4000K/6500K	3000K/4000K/6500K	3000K/4000K/6500K	3000K/4000K/6500K	3000K/4000K/6500K	3000K/4000K/6500K	3000K/4000K/6500K
Outer size	As Per Requirement						
Cut-out							
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

Sl 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	Ip65	Ip65	Ip65	Ip65	Ip65
4	Material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
5	Body Color	silver Grey Powder Coated	silver Grey Powder Coated	silver Grey Powder Coated	silver Grey Powder Coated	silver Grey Powder Coated
6	Color	Color/white warm white	Color/white warm white	Color/white warm white	Color/white warm white	Color/white warm white
7	LED Used	EPISTAR	EPISTAR	EPISTAR	EPISTAR	EPISTAR

At Citizen, we conceptualise, 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 levelized 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 roboized, 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 time and cost deadlines, in total compliance with local regulations.



COMMISSIONING

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



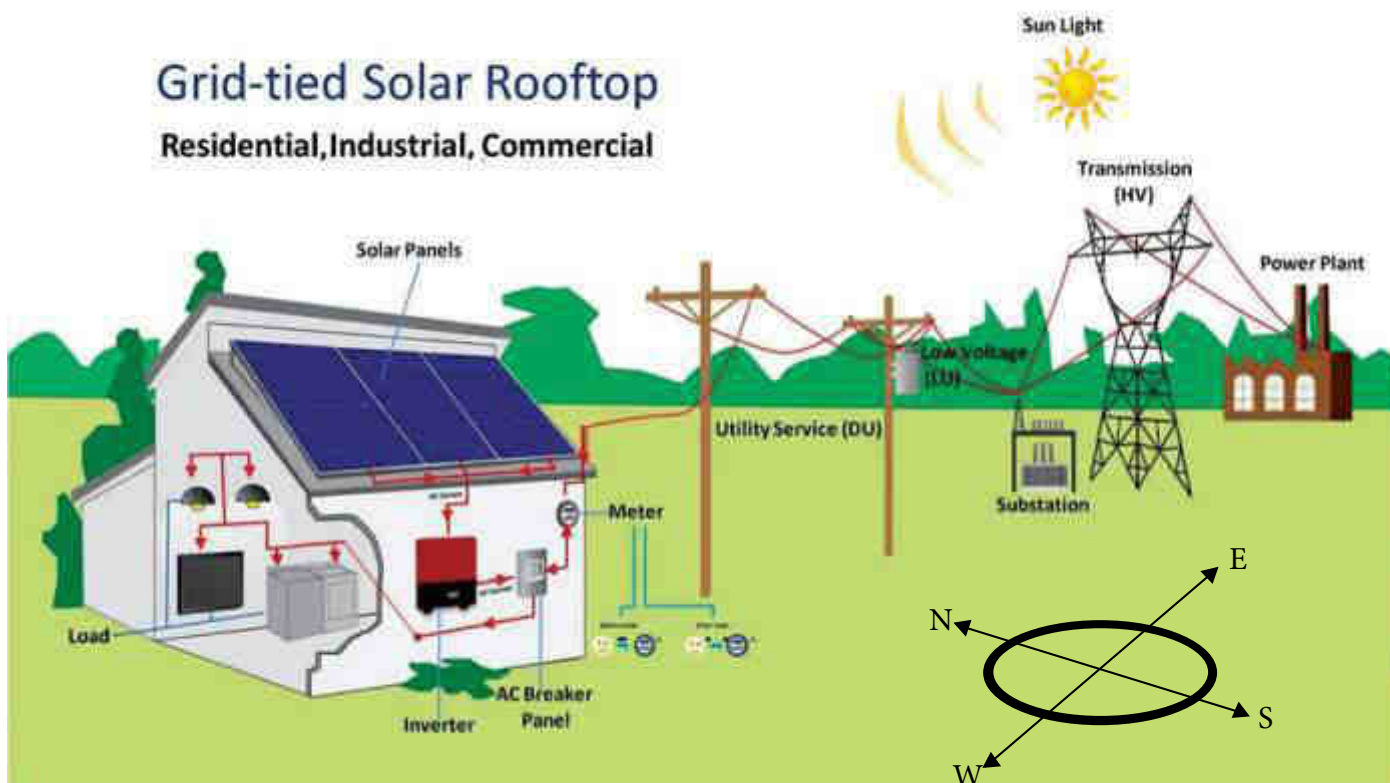
FINANCIAL CONSULTANCY

We design solar plants with optimum PV ROI calculation.

INCOME TAX DEPRECIATION BENEFITS

SOLAR SYSTEM

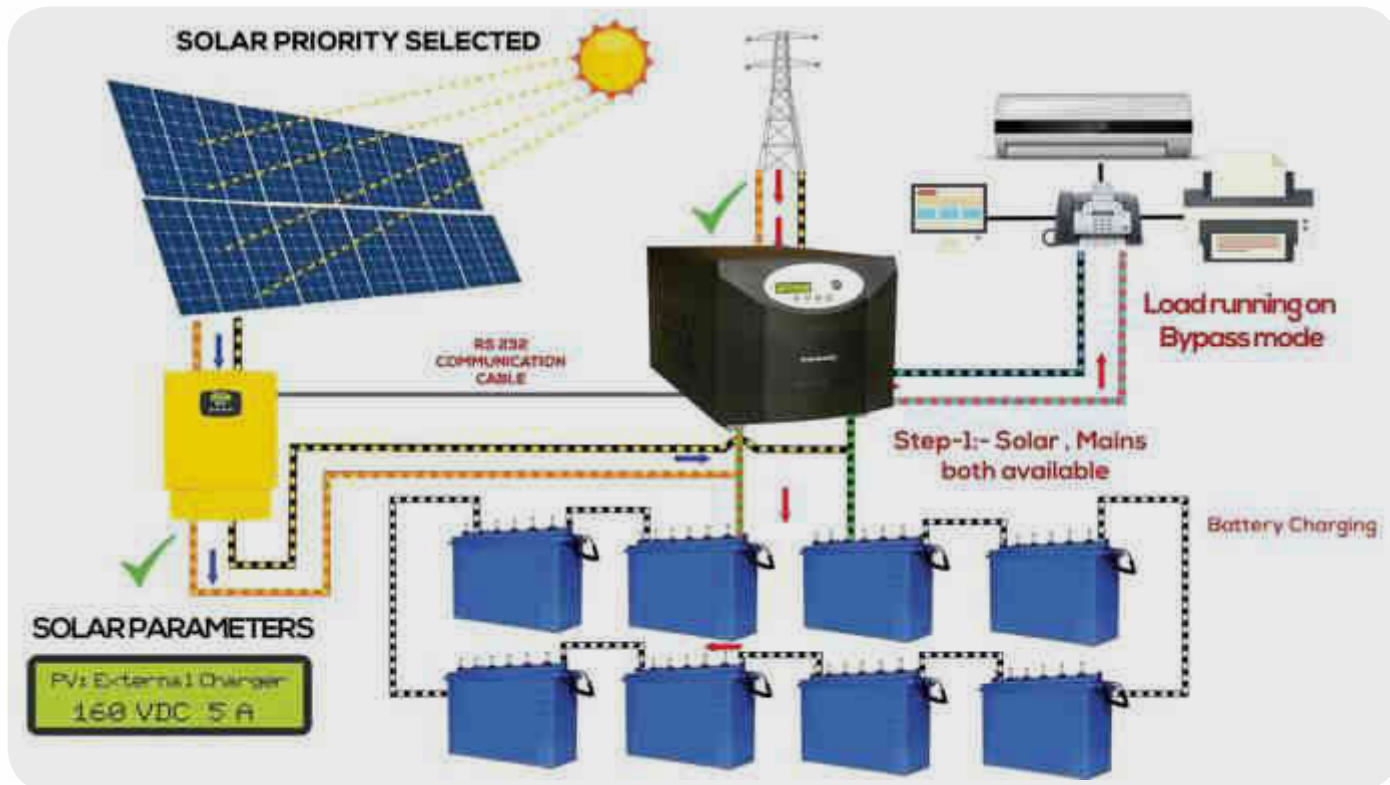
Grid-tied Solar Rooftop Residential, Industrial, Commercial



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
NET METER	Customer will have net metering facility- new digital time of use consumption meter that measures how much power home uses and any excess power your solar power system feeds back to the grid.
EXPORTED ELECTRICITY	When the solar system generate excess electricity the excess electricity generated goes through the export meter and is sold back to your electricity retailer adding credit to your account.
GOVERNMENT SCHEMES	Subsidy for residential roof top solar customers & accelerated depreciation for commercial and industrial customers





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

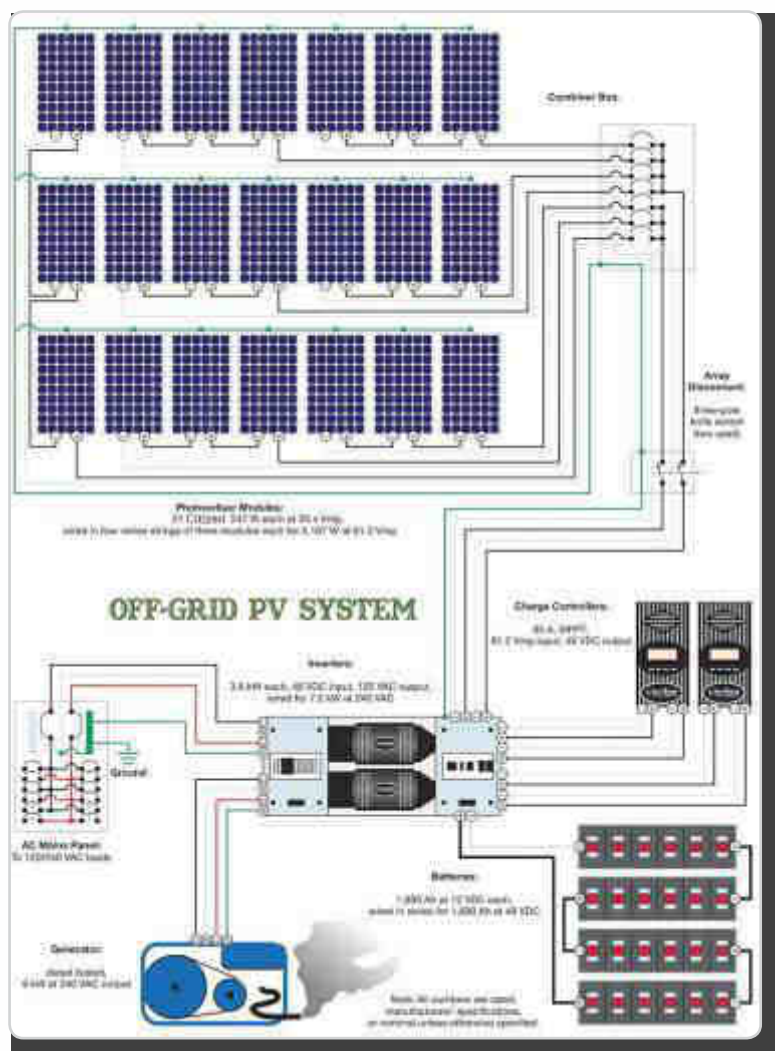
1. No access to the utility grid

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-sufficient

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

On the flip 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.



ACCESSORIES

CONNECTORS



MC4 CONNECTOR

Branch Connector

Description	Specification
Rated Voltage	1000V DR
Rated Current	25A (2.5MM ²), 30A (4.0MM ² , 6.4MM ²)
Test Voltage	6KV (50HZ)
Degree Of Protection	IP 67
Contact Material	Copper With Tin Plating
Operating Temperature	-40 C TO 85 C
safety Class	II
Contact Resistance	<0.5MO
Insertion Force	≤50N
Withdrawal Force	≥50N
suitable Cable	2.5MM ² / 4MM ² / 6MM ²
Locking system	snap In

CABLES (AC & DC)



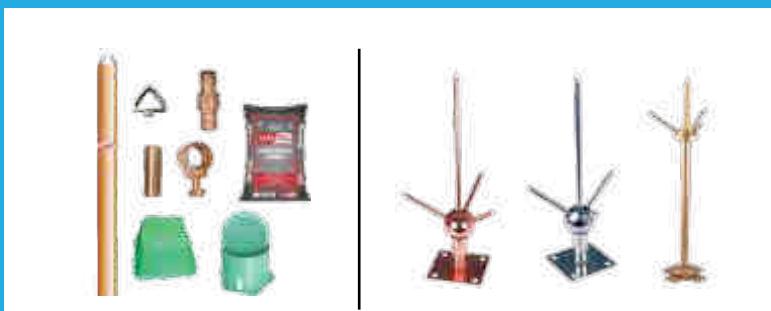
	Specification
Conductor	Tinned Fine Copper strands Acc To VDE 0295/EC 60228, Class5
Insulation	XLPE, XLPO, Flame Retardant, Halogen Free, Electron- Beam Cross- Linked
Jacket	XLPE, XLPO, Flame, Retardant, Halogen Free, Electron-Beam Cross-Linked UV And Ozone Resistant
Jacket Colour	Black
size	2.5MM ² , 4MM ² , 6MM ² , 10MM ²

DCDC / ACDB



	Specification
Degree of Protection	IP 65/66/67
Impact Resistance	Ik 08 (-25 °C... +35°C)
Flammability Rating	UI 746C 5V
Base	Fibreglass Reinforced Polycarbonate
Cover	Polycarbonate
Cover screws	Fibreglass Reinforced Polyamide
Gasket	PUR (Polyurethane)
size & Design	As Per Provided sld
these enclosure have various part like DC/AC MCB, DC fuse, AC/DC SPD's, lugs, terminal block & copper busbar etc.	

Protection Kit For Earthing & Lightning



	Specification
Earthing electrode copper/GI 50mm dia 3 mtr long	The strip terminal of 40x6cm
Earthing electrode copper/GI 50mm dia 2 mtr long with	The strip terminal of 40x6cm
Earthing electrode copper/GI 76mm dia 3 mtr long with	The strip terminal of 50x6cm
Earthing electrode copper/GI 76mm dia 2 mtr long with	The strip terminal of 50x6cm
Earthing chamber and per pit cover	Bag of bfc compound of 50kg
Lighting arrester rod of copper, aluminium & GI of	Different sizes & shape

MOUNTING STRUCTURE

Ground Mounted Structure



Fixed Tilt

It is designed to cater to a singular tilt angle.
It can be further categorized into single pole structure & Dual pole structure



Variable Tilt

It is designed to accommodate various tilt angles.
It can be further categorized into curved slot & Hinge mechanism.



Single Axis Tracking

It is an innovative and cost effective single axis tracking solution
It can broadly be divided into mounting structure & tracker Driving components.

Roof Mounted Structure

Fixed Mounting

It is premium rooftop mounting solutions designed
For flat RCC roof and provides for rapid expansion
From kilowatt to megawatt scales.

Clamp Type

It is engineered to provide maximum flexibility in both design
and
Installation for various trapezoidal-profile metal roofs. Requiring
Very few components for installation

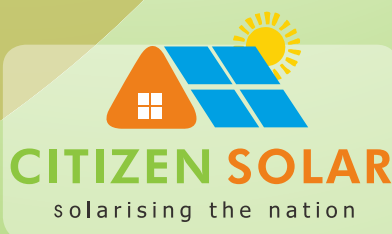
Klip Type

It is non-penetrative solution for concealed roofs. For different
Rooftop profiles, different clips are designed



NOTES

[illegible]A large, empty rounded rectangular box with a thin black border, intended for a drawing or diagram.



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