CITIZEN SOLAR

solarising the nation

Engineered in Germany, Made in India

BIS / ALMM Approved

A Trusted Brand For Quality And Performance

High Efficiency PV Modules
40 Wp - 650 Wp

High Grade Raw Materials
A+ Grade Solar Cells

180 MW. Fully Automatic Solar Module Manufacturing Line

Comprehensive Certificates

- IS 14286 / 61730-1 / 61730-2
- 62804 / 61701 / 61853-1
- ISO 9001:2015
- ISO 14001:2015
- OHSAS 18001:2007

25 Year Linear Power Output Warranty

10 Year Product Warranty

+91 8460728007
www.citizensolar.com

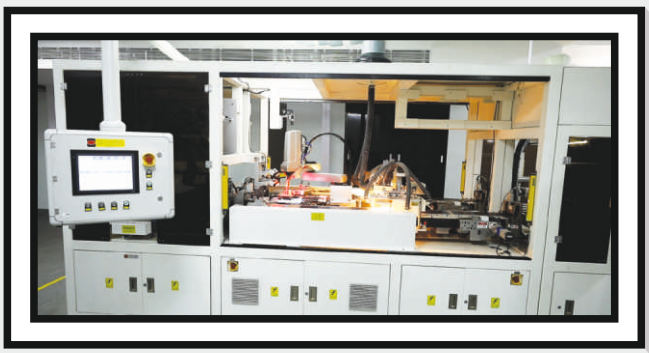
Citizen Solar Private Limited is a part of 28 years old Citizen Group: a BIS Certified, MNRE & ALMM approved, an ISO 9001 - 14001 - 45001 & SMERA rated Company which is one of India's premier Solar Panel and Solar Inverter manufacturer dealing with technologically astute and cutting edge solutions for industrial and business use, equipped with world class machinery and industry leading infrastructure.

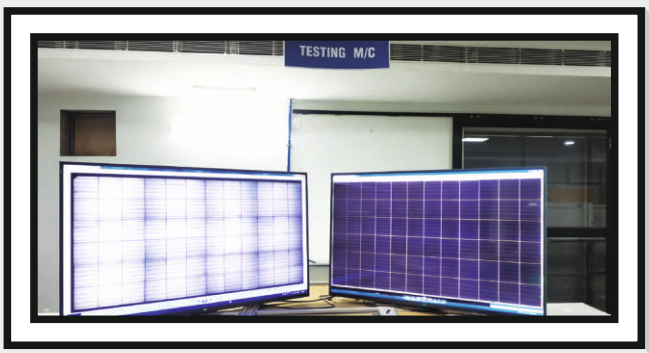
Citizen Group has a rich history of focusing on developing and manufacturing various quality products. Citizen Solar Private Limited under the Umbrella of Citizen Group touched multiple industries across different sectors with A PAN India presence. The Group has successfully catered to a wide array of industries and businesses spread across multiple verticals such as Textiles, Manufacturing and `Export, Publishing, Consultancy, Advertising, Real Estate and more.

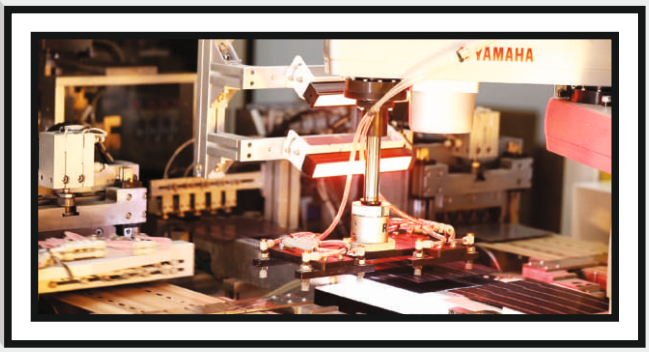
Citizen Solar's state-of-the-art manufacturing facility is located at Chhatral Kadi Road, Gujarat having been spread over a massive 45,000 square feet, capable of consistently producing 180MW energy per annum and it's Corporate office is based at Ahmedabad,Gujarat.

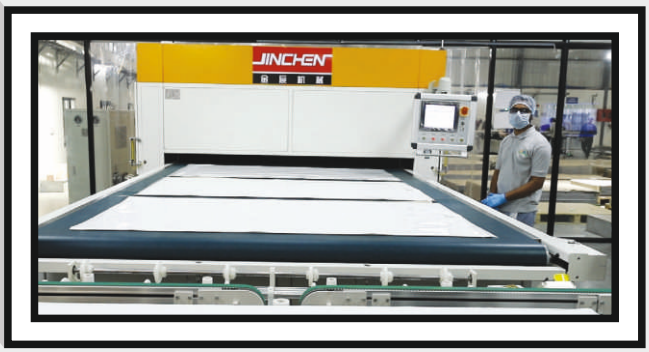
Citizen Solar comprises of two main divisions that includes Citizen Solar Technology which is a leading **Solar Module** and **Solar Inverter Manufacturer** with a Pan India presence and that is widely known for their optimum quality

We are currently supplying Solar PV Moduals and Inverters to EE&REM, UPNEDA, UREDA, PEDA, HAREDA, REDA, MEDA, GEDA to name a few.









Mission

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

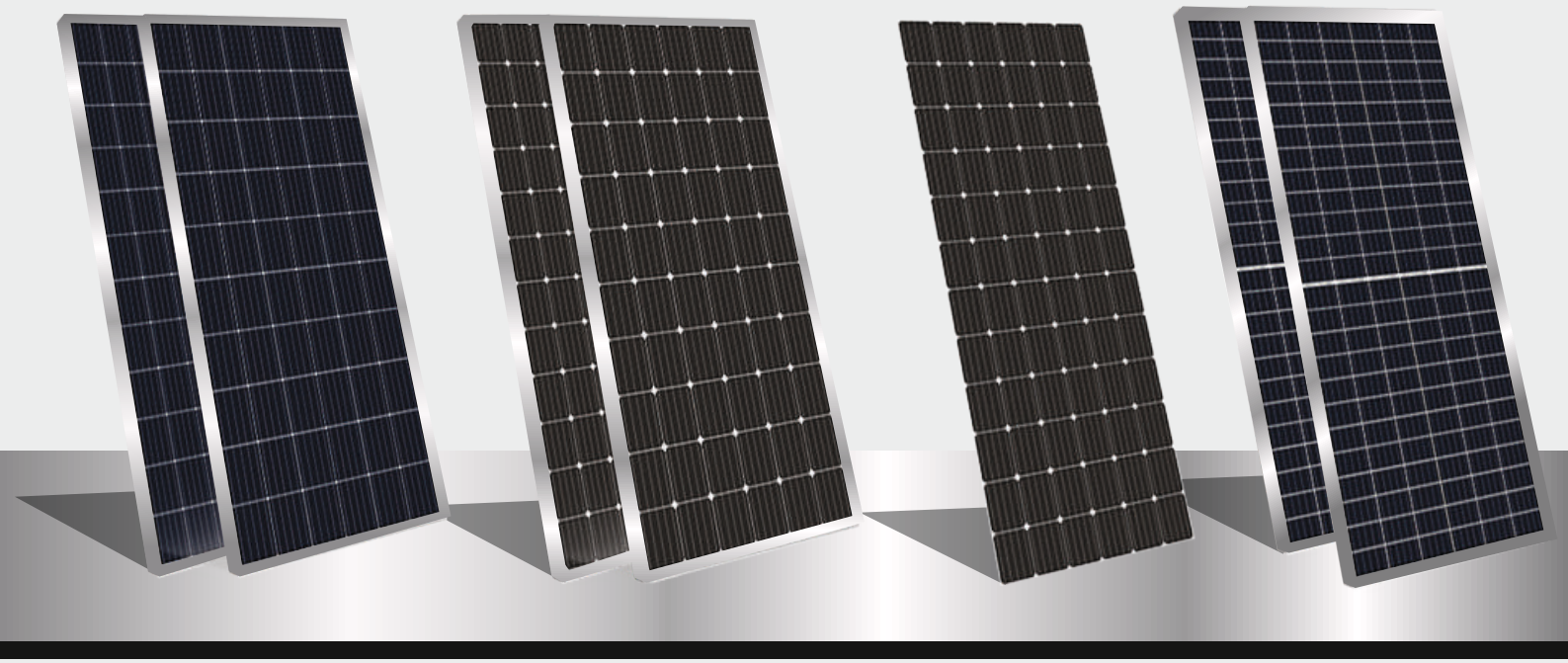
Vision

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

POLY CRYSTALLINE & MONO PERC SOLAR PV MODULES

CITIZEN SOLAR
solarising the nation

335wp+	400wp+	400wp+	440wp -650wp



FLASH SERIES	ARROW SERIES	ENLIGHT SERIES	NEWLIGHT SERIES
(POLYCRYSTALLINE & POLY PERC)	(MONOCRYSTALLINE & MONO PERC)	(BIPV)	(TWIN PEAK)

Key Features

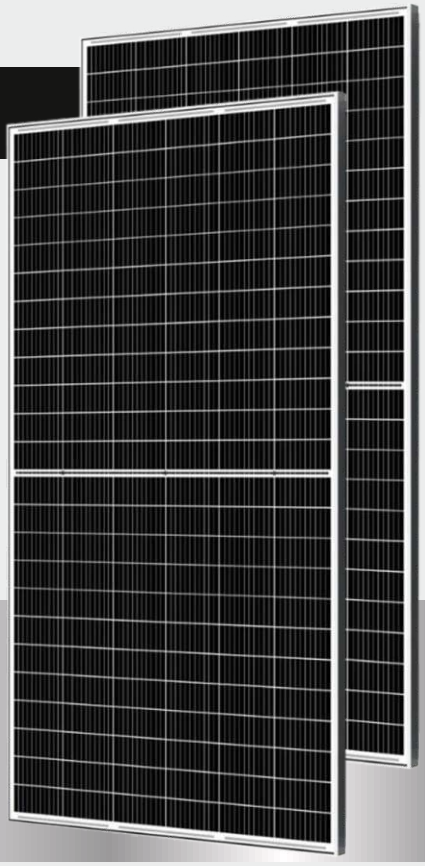
- 5BB, 9BB, 10BB & 12BB Solar Cell design to improve the module efficiency & give a better aesthetic appearance.
- Excellent module efficiency upto 21.5% in Mono PERC and up to 17.6 % in poly crystalline achieved through advanced manufacturing capabilities and technology.
- ARC Coated high transmission glass is used which directs more light on module resulting higher energy output.
- Robust aluminium frame, ensure the modules to withstand wind load upto 2400 Pa. & heavy snow load upto 5400 Pa.
- Positive power tolerance of up to +3% extra output.
- High PID resistant, advance technology & qualified material leads to high resistant to PID.
- Ip68 junction box for long-term weather endurance.
- Low degradation and excellent performance under low light condition and withstanding to harsh environment.

CITIZEN SOLAR
solarising the nation

CSPL MONO PERC NEW LIGHT PRO SERIES : CSPL 535-550W

NEWLIGHT PRO

545+Wp



Advance Tech Delivering Modules Which Are

- Highly Efficient • Highly Reliable
- Highly Flexible • Highly Powerful
- Lower On Carbon • More Savings

21.32% MAX MODULE EFFICIENCY	**0~+5W** POWER TOLERANCE	**<2%** FIRST YEAR POWER DEGRADATION
0.45% YEAR 2-30 POWER DEGRADATION	**HALF CUT CELL** LOWER OPERATING TEM-PERATURE	

FEATURES

Remarkable Performance In Shaded Condition

Low-Light Behaviour
High Yields With Low Radiation Intensity

Higher Performance
Half Cell Technology Offer More Power Per Square Meter, Resulting In Higher Yields At Lower BOS Cost

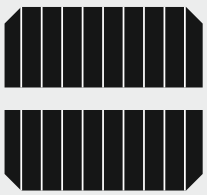
Temperature Coefficient
Even On Hot Days, Citizen Solar Modules Produce Reliable Yields & Lose Less Efficiency Than Standard Solar Modules.

HOW IT WORKS

NEWLIGHT PRO 144 Cell series module produces energy even if a part of the module is shaded. Whereas if standard module is partially shaded minimum one string will completely stop producting power, this accounts to one third reduction in power generation. Moreover, it can even completely stop generating power if shaded across its breadth. NEWLIGHT PRO 144 cell series module is split into tow parts. Each section of 72 Half cut cells generaters power on standalone basis but combines again before current exits the module. This structure results in power generation in non-shaded area of the module even if one of the section is partially or completely shaded, resulting in higher overall energy yield as compared to standard module.

QUADRATECH | SMART TECHNOLOGY

New Multi-Busbar Cell Design
For More Power & Better Reliability. Shorter Distance Between Busbar Allows Better Flow Of Electrons & Reduces Power Loss. Less Residual Stress, Less Micro-Cracks & Hotspot Risks.



Half Cut Cells
With High-Precision Laser Cut Cells, The Current (I) Flowing In Each Busbar Is Halved Resulting In Lower Electrical Resistance & An Increased Overall Efficiency Of About 2.5%

Three Piece Junction Box
The Unique Three Piece Design Lower Series Resistance Avoids Diode Heating & Enable Quicker Heat Dissipation, Which Guarantess Long-Term Stable Perfomance & Improved Power Efficiency.

Passivated Emitter & Rear Cell (PERC)
Higher Efficiency Is Achieved With Latest PERC Cell Technology Which Captures More Wavelenghts Of Light Through Mirror Like Reflector Behind The Solar Cell

CSPL MONO PERC NEW LIGHT PRO SERIES : CSPL 535-550W

CITIZEN SOLAR
solarising the nation

NEWLIGHT PRO

545+Wp

Electrical Parameters @ STC

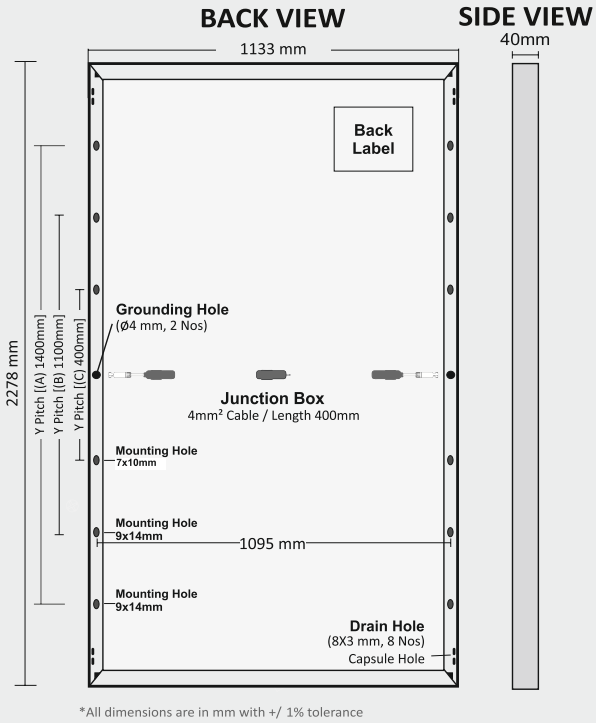
Model No.	CSPL_535	CSPL_540	CSPL_545	CSPL_550
Nominal Maximum Power (Pmax)	535W	540W	545W	550W
Optimim Operating Voltage (Vmp)	41.73	42.07	42.45	42.79
Optimim Operating Current (Imp)	12.83	12.84	12.85	12.86
Open Circuit Voltage (Voc)	49.15	49.34	49.45	49.75
Short Circuit Current (Isc)	13.49	13.5	13.51	13.53
Module Eff(%)	20.74	20.94	21.1	21.32

Values At Standard Test Conditions STC (airmass AM 1.5, irradiance 1000 W/m², cell temerature 25˚C).
*Where xxx indicates the nominal power class (P_{MPP}) at STC indicated above.

Electrical Parameters @ NOCT

Maximum Power (Pmax)	396.03	399.57	403.49	407.04
Optimim Operating Voltage (Vmp)	38.42	38.74	39.09	39.40
Optimim Operating Current (Imp)	10.31	10.31	10.32	10.33
Open Circuit Voltage (Voc)	46.23	46.41	46.51	46.79
Short Circuit Current (Isc)	10.93	10.94	10.94	10.96

Nominal Operating Cell Temerature NOCT (800 W/m², AM 1.5, windspeed 1 m/s, ambient temperature 20˚C). Typical values, actual values may differ. *Where xxx indicates the nominal power class (P_{MPP}) at STC indicated above.



*All dimensions are in mm with +/ 1% tolerance

*Due to continuous innovation, research & product improvement the specifications in this product information sheet are subject to change without prior notice. Installation instructions must be followed. See the installation manual or contact technical service department for further information on approved installation. Atleast 97.5% of nominal power during first year. Thereafter max. degradation in performance of 0.7% p.a. See warranty conditions for further details.

Mechanical Specifications

Dimensions (L x W x T in mm)	2278 x 1133 x 40
Weight(kg)	28.6
No Of Cells	144 [12x6 / 12x6]
Frame	Anodized Aluminum Alloy (6063, Temper T5, Silver Color)
Front Cover	Low Iron Tempered Glass (3.2 mm thick)
Encapsulant	Ethylene-vinyl Acetate (EVA) - PID free and UV resistant
Back Cover	Fluoro-polymer based composite film
Junction Box / Connector ratting/Type	Split Junction Box (IP68) - Weatherproof / MC4 compatible
Cable Cross - Section & Length	4mm² & 400mm
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back
Mounting Holes Pitch (Y)-mm	[A] 1400 mm [B] 1100 mm [C] 400 mm
Mounting Holes Pitch (X)-mm	1095mm

MAXIMUM OPERATING CONDITIONS

Operating Temperature:	-40°C to +85°C
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	25A

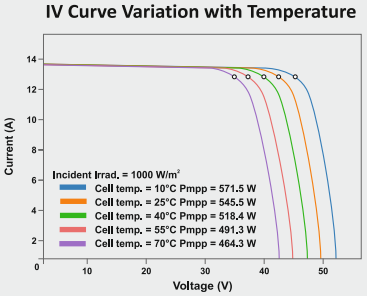
TEMPERATURE COEFFICIENTS

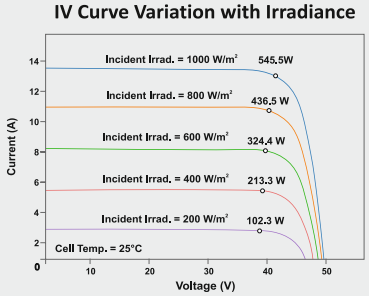
Current α(Isc) :	0.0305%/C
Voltage β(Voc) :	-0.2427%/C
Power ϒ(Pmax) :	-0.3308%/C

STACKING STANDARD

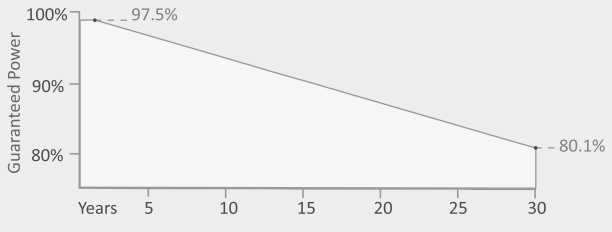
	19FT	32FT
No. of Modules	192 Nos	432 Nos
No of Pallets	8 Pallets	16 Pallets
Modules per Pallet / Weight	24 Nos / 700 Kgs.	27 Nos / 800 Kgs.
Pallet dimensions	2320*1000*1275	2320*1130*1275

Electrical Performance & Temperature Dependence





LINEAR PERFORMANCE WARRANTY



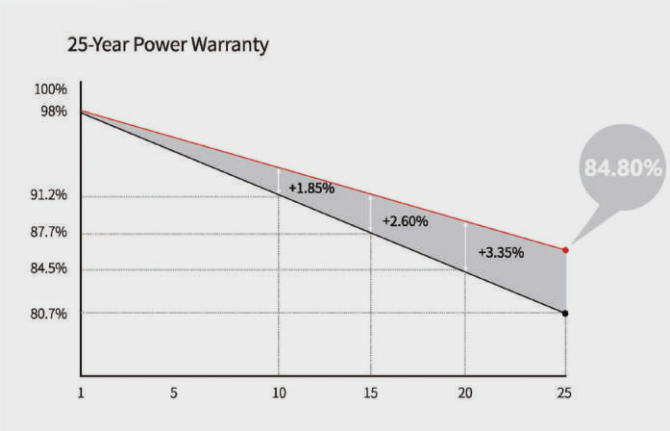
*graphics shown herein above are reference purpose only.
Please consult Rayzon Solar Technical Team for any further clarification.

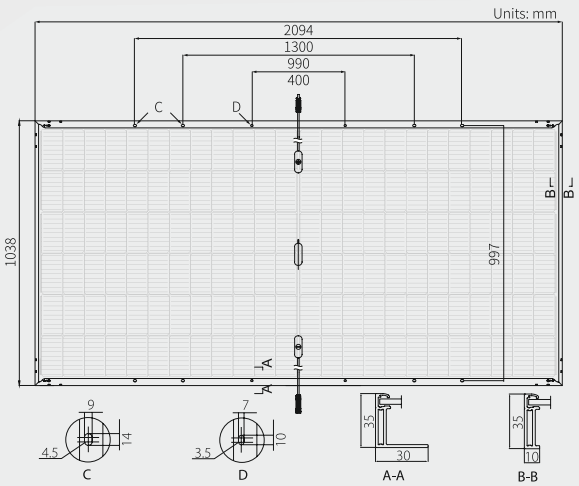
CITIZEN SOLAR
solarising the nation

CSPL MONO PERC NEW LIGHT SERIES : CSPL 430-460W

21.2%	0~+5W	<2%	0.55%	HALF-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-25 POWER DEGRADATION	Lower operating temperature

Additional Value





GENERAL DATA

Cell Orientation	: 144 Cells [2X(6X12)]
Junction Box	: IP68, Three diodes
Output Cable	: 4mm², +400, -200mm / ±1400mm lenght can be customized
Glass	: Single Glass / ARC Temepered Glass
Frame	: Anodized aluminum alloy frame
Weight	: 24kg
Dimension	: 2094 x 1038 x 35mm
Packaging	: 30pcs per Pallet

Electrical Characteristics

STC : AM1.5 1000W/m² 25°C NOCT : AM 1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax : ±3%

Model No.	CSPL_430		CSPL_435		CSPL_440		CSPL_445		CSPL_450		CSPL_455		CSPL_460	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	430	321.1	435	324.9	440	328.6	445	332.3	450	336.1	455	339.8	460	343.5
Open Circuit Voltage (Voc/V)	48.5	45.5	48.7	45.7	48.9	45.8	49.1	46.0	49.3	46.2	49.5	46.4	49.7	46.6
Short Circuit Current (Isc/A)	11.31	9.15	11.39	9.21	11.46	9.27	11.53	9.33	11.60	9.38	11.66	9.43	11.73	9.48
Voltage at Maximum Power (Vmp/V)	40.7	37.9	40.9	38.1	41.1	38.3	41.3	38.5	41.5	38.6	41.7	38.8	41.9	39.0
Current at Maximum Power (Imp/A)	10.57	8.47	10.64	8.53	10.71	8.59	10.78	8.64	10.85	8.70	10.92	8.75	10.98	8.80
Module Efficiency (%)	19.8		20.0		20.2		20.5		20.7		20.9		21.2	

Operating Parameters

Operational Temperature	: -40°C ~ +85°C
Power Output Tolerance	: 0 ~ +5W
Voc and Isc Tolerance	: ±3%
Maximum System Voltage	: DC1500V (IEC/UL)
Maximum Series Fuse Rating	: 20A
Nominal Operating Cell Temperature	: 45 ± 2°C
Protection Class	: Class II
Fire Rating	: Class C
Application Classification	: Class A

Mechanical Loading

Front Side Maximum Static Loading	: 5400Pa
Rear Side Maximum Static Loading	: 2400Pa
Hailstone Test	: 25mm Hailstone at the speed of 23m/s

Temperature Ratings (STS)

Temperature Coefficient of Isc	: +0.048%/°C
Temperature Coefficient of Voc	: -0.270%/°C
Temperature Coefficient of Pmax	: -0.350%/°C

Declaration : With the technical progress and product updates,there exists a deviation between the technical parameter of the CITIZEN SOLAR's future products and the technical parameter in this specification,The CITIZEN SOLAR reserves the right to adjust the technical parameter at any time without notifying the customers, CITIZEN SOLAR reserves the final right of interpretation.

CITIZEN SOLAR
solarising the nation

CSPL POLY FLASH SERIES : CSPL 325-350W

Electrical Parameters at Standard Test Conditions STC

Type	CSPL24P325	CSPL24P330	CSPL24P335	CSPL24P340	CSPL24P345	CSPL24P350
Power Output Pmax (W)	325	330	335	340	345	350
Voltage at Pmax V mpp (V)	37.50	37.72	37.90	38.12	38.30	38.52
Current at Pmax I mpp (A)	8.67	8.75	8.84	8.92	9.01	9.10
Open-circuit Voltage VOC (V)	45.8	46	46.2	46.4	46.6	46.8
Short-circuit Current ISC (A)	9.15	9.22	9.3	9.37	9.44	9.51
Module Efficiency (%)	16.7	17.00	17.2	17.5	17.8	18.00

STC : 1000 W/m² irradiance, 25°C cell temperature, AM 1.5g

Electrical Parameters at NOCT

Type	CSPL24P325	CSPL24P330	CSPL24P335	CSPL24P340	CSPL24P345	CSPL24P350
Power Output Pmax (W)	240.5	244.2	247.9	251.6	255.3	259.0
Voltage at Pmax V mpp (V)	34.35	34.55	34.72	34.92	35.08	35.29
Current at Pmax I mpp (A)	7.00	7.07	7.14	7.21	7.28	7.34
Open-circuit Voltage VOC (V)	41.93	42.11	42.30	42.48	42.66	42.85
Short-circuit Current ISC (A)	7.39	7.45	7.51	7.57	7.63	7.68

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

Thermal Characteristics

Nominal Operating Cell Temperature	NOCT	°C	45°C ± 2°C
Temperature Coefficient of Pmax	γ	%/°C	-0.40
Temperature Coefficient of VOC	β	%/°C	-0.31
Temperature Coefficient of ISC	α	%/°C	0.043

Operating Condition

Max. System Voltage	1000vdc
Max. Series Fuse Rating	15A
Limiting Reverse Current	25A
Operating Temperature Range	-40 °C to+85 °C
Max. Static Load, Front	5400pa
Max. Static Load, Back (e.g., wind)	2400pa
Max. Hailstone Impact (diameter / velocity)	25mm dia // 23m/s

Mechanical Data

Dimensions (L / W / H)	1961mm / 991mm / 35mm
Weight	21.2kg
Front Cover (material / thickness)	Ar Coated High Transmission Low Iron Tempered Glass/3.2mm
Cell (qty. / material / dim./no. of busbars)	72/ multicrytalline / 157mm x 157mm / 5BB
Encapsulate (material)	Enthylene Vinyl acetate (EVA)
Backsheet	UV Protected
Frame (material / color)	Anodized aluminum alloy /silver
Junction Box (protection degree)	IP68/67, 3 bypass diodes
Cable (length / cross-sectional area)	1200mm / 1000mm / 4mm²
Plug Connector (type / protection degree)	MC4

Packaging Specification

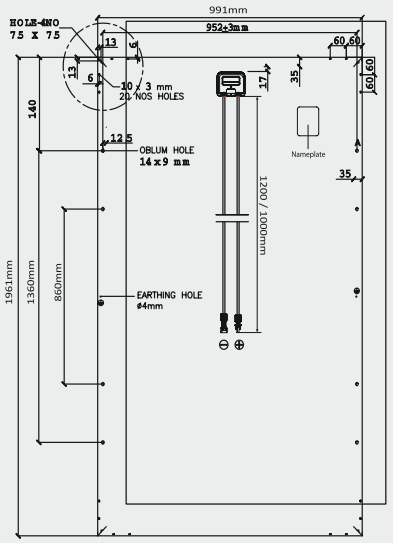
Container Size	20'	40'HC
Quantity Per Pallet :	30	30
Pallets / Container :	10	20
Quantity / Container :	300	600

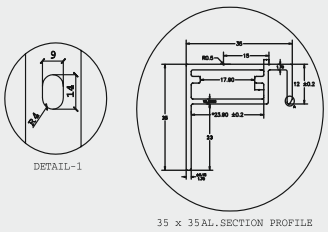
(Two pallets = One stack)

Linear Performance Warranty

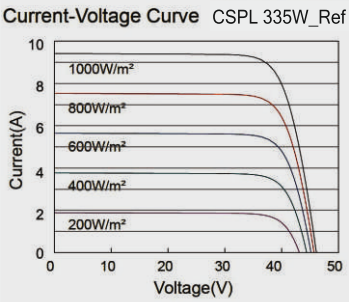
- 90% of the specified minimum output of the module for a 10 years period
- 80% of the specified minimum output of the module for a 25 years period
- 10-year product warranty
- 25-year linear performance warranty

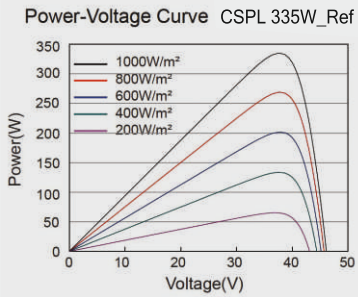
Engineering Drawing (mm)

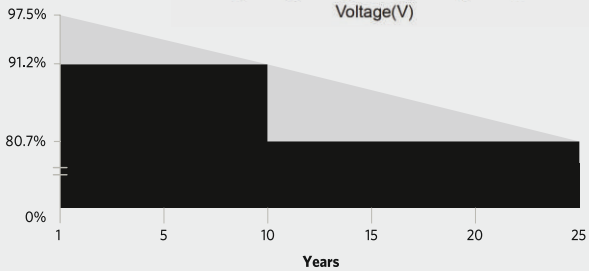




Electrical Performance







Declaration : With the technical progress and product updates,there exists a deviation between the technical parameter of the CITIZEN SOLAR's future products and the technical parameter in this specification,The CITIZEN SOLAR reserves the right to adjust the technical parameter at any time without notifying the customers, CITIZEN SOLAR reserves the final right of interpretation.

CSPL MONO PERC ARROW SERIES : CSPL 380-400W

CITIZEN SOLAR
solarising the nation

Electrical Parameters at Standard Test Conditions STC

Type	CSPL24M380	CSPL24M385	CSPL24M390	CSPL24M395	CSPL24M400
Power Output Pmax (W)	380	385	390	395	400
Voltage at Pmax V mpp (V)	39.75	39.97	40.17	40.38	40.60
Current at Pmax I mpp (A)	9.57	9.64	9.71	9.79	9.86
Open-circuit Voltage VOC (V)	48.5	48.70	48.90	49.10	49.30
Short-circuit Current ISC (A)	9.93	10.00	10.07	10.14	10.22
Module Efficiency (%)	19.1	19.4	19.6	19.9	20.1

STC : 1000 W/m² irradiance, 25°C cell temperature, AM 1.5g

Electrical Parameters at NOCT

Type	CSPL24M380	CSPL24M385	CSPL24M390	CSPL24M395	CSPL24M400
Power Output Pmax (W)	281.2	284.9	288.6	292.3	296.0
Voltage at Pmax V mpp (V)	36.79	37.00	37.18	37.38	37.58
Current at Pmax I mpp (A)	7.64	7.70	7.76	7.82	7.88
Open-circuit Voltage VOC (V)	44.94	45.13	45.31	45.50	45.68
Short-circuit Current ISC (A)	8.03	8.09	8.15	8.20	8.27

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

Thermal Characteristics

Nominal Operating Cell Temperature	NOCT	°C	45°C ± 2°C
Temperature Coefficient of Pmax	γ	%/°C	-0.38
Temperature Coefficient of VOC	β	%/°C	-0.36
Temperature Coefficient of ISC	α	%/°C	0.07

Operating Condition

Max. System Voltage	1000vdc
Max. Series Fuse Rating	20A
Limiting Reverse Current	25A
Operating Temperature Range	-40 °C to+85 °C
Max. Static Load, Front	5400pa
Max. Static Load, Back (e.g., wind)	2400pa
Max. Hailstone Impact (diameter / velocity)	25mm dia // 23m/s

Mechanical Data

Dimensions (L / W / H)	1986mm / 1001mm / 35mm
Weight	22.5kg
Front Cover (material / thickness)	Ar Coated High Transmission Low Iron Tempered Glass/3.2mm
Cell (qty. / material / dim./no. of busbars)	72/ Mono Perc / 158.75mm x 158.75mm / 5BB
Encapsulate (material)	Enthylene Vinyl acetate (EVA)
Backsheet	UV Protected
Frame (material / color)	Anodized aluminum alloy /silver
Junction Box (protection degree)	IP68/67, 3 bypass diodes
Cable (length / cross-sectional area)	1200mm / 1000mm / 4mm²
Plug Connector (type / protection degree)	MC4

Packaging Specification

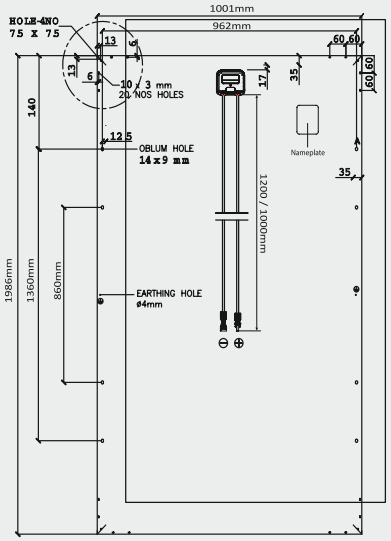
Container Size	20'	40'HC
Quantity Per Pallet :	30	30
Pallets / Container :	10	20
Quantity / Container :	300	600

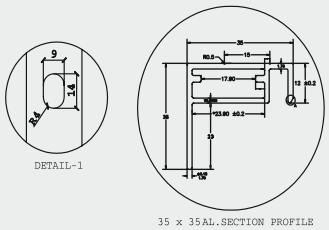
(Two pallets = One stack)

Linear Performance Warranty

- 90% of the specified minimum output of the module for a 10 years period
- 80% of the specified minimum output of the module for a 25 years period
- 10-year product warranty
- 25-year linear performance warranty

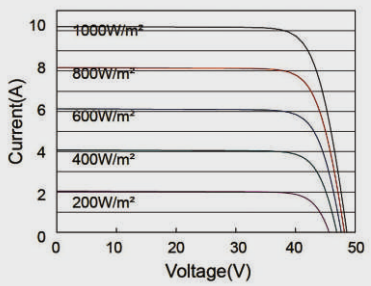
Engineering Drawing (mm)



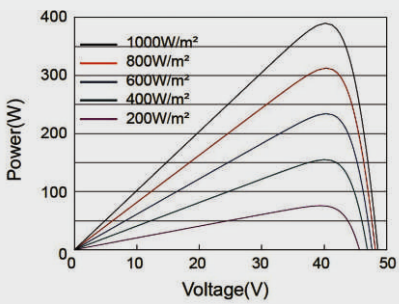


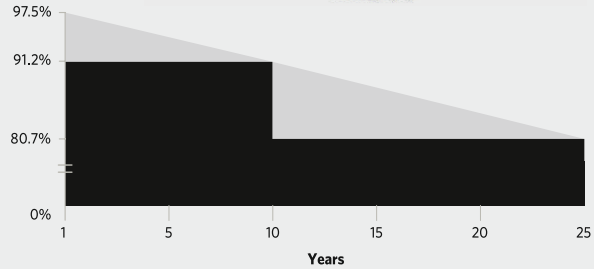
Electrical Performance

Current-Voltage Curve CSPL 390W_Ref



Power-Voltage Curve CSPL 390W_Ref





Declaration : With the technical progress and product updates,there exists a deviation between the technical parameter of the CITIZEN SOLAR's future products and the technical parameter in this specification,The CITIZEN SOLAR reserves the right to adjust the technical parameter at any time without notifying the customers, CITIZEN SOLAR reserves the final right of interpretation.

CITIZEN SOLAR
solarising the nation

8 YEAR WARRANTY

CS SERIES

ON-GRID PV INVERTERS

Single Phase For Residence
CS 1KW/2KW/3KW/4KW/5KW/6KW

Three Phase For Residence
CS 5KW/6KW/8KW/10KW/12KW

Three Phase For Commercial And Industry
CS 15KW/20KW/30KW/50KW/60KW/70KW/75KW/80KW/100KW/110KW

CONVENIENT & RELIABLE,
CUSTOMER ORIENTED

PRE SALES SUPPORT

- **Tailored Solutions**
- **Specialized Product Consulting**
- **One-on-One Application Coaching**
- **Systematic & Consistent Product Training**

AFTER SALES SERVICE

Sufficient Warranty Period

- 96 months standard warranty for On-Grid inverters. (from the date of Tax Invoice)
- 24 months standard warranty for Hybrid inverters. (from the date of Tax Invoice)
- 24 months standard warranty for accessories. (from the date of Tax Invoice)

Replacement Service

- Spare units will be sent to customer for immediate resolution.
- 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

Customer Care
+91 8000 111 222

CITIZEN SOLAR
solarising the nation

TECHNICAL DATASHEET

Model (CS)	Single Phase																Three Phase																							
	1 KW	2 KW	3 KW	4 KW	5 KW	6 KW	1.2 KW	2.2 KW	2.3 KW	3.2 KW	3.3 KW	3.8 KW	4.2 KW	4.6 KW	5.2 KW	5.3 KW	6.2 KW	5 KW	6 KW	7 KW	8 KW	10 KW	12 KW	15 KW	20 KW	25 KW	25 KW	33 KW	35 KW	40 KW	50 KW	60 KW	70 KW	75 KW	80 KW	100 KW	100 KW	110 KW
Input (DC)																																								
Max Peak DC Input Power (KW)	1.1	2.2	3.3	4.4	5.5	6.6	1.1	2.2	2.3	3.2	3.3	3.8	4.4	5.06	5.5	5.83	6.6	6.5	7.8	9.1	10.4	12	13.2	16.5	24	27.5	30	36	38.5	48	60	72	77	90	96	100	120	132	
Max. DC I/P (V dc)	500V DC			500/600V DC			500V DC				500/600V DC							1000 VDC					1000 VDC				1000 VDC											
Max. MPPT I/P Current (A)	10A			10A			10A				10A							10A				10A / 10A+ 20A	10/ 20A		25A	28.5 A	28.5A				40A							
MPPT Short Circuit Current (A)	15A																	15A				21.7A			36A	40A	57A											
MPPT Tracking Voltage (Vdc)	100-500V																	200-850V									250-850V											
Min. Start Voltage (V)	100/120V																	250V DC																				
Number Of MPPT Tracker	1			2			1						2					2							2			3	3/4	4				6	6			
Strings Per MPPT Tracker	1																	1					2/1	2	2	3	3	3/4	3	3/4		4	4	4				
Output (AC)																																								
Rated Output Power (KW)	1	2	3	4	5	6	1	2	2	3	3.3	3.8	4	4.6	5	5.3	6	5	6	7	8	10	12	15	20	25	25	30	35	40	50	60	70	75	80	100	100	110	
Rated Grid Voltage (V)	230V																	400VAC																					
Nominal Grid Freq. (Hz)	50Hz																	50Hz																					
Max. Output Current AC (A)	4.37	8.69	13	17.4	21.7	26	4.37	8.69	8.69	13	14.34	16.52	17.4	20	21.7	23.04	26	7.2	8.7	10.1	11.6	14.5	17.4	21.17	29	36.2	36.2	47.8	50.7	58	72.4	87	101.4	108.7	115.9	144.5	144.5	159	
AC Connection (With PE)	P + N +E																	3P + N +E																					
THD (%)	2.5-5%																	2.5-5%							<3%													
Output Power Factor (%)	>0.99%																	>0.99%																					
Efficiency																																								
Max. Conversion Eff. (%)	97.5%			97.6%			97.5%				97.6%							98%		97%																			
Max. Euro Efficiency (%)	97%																	97.50%						98.5 %	98.2%													
Max. MPPT Efficiency (%)	>99%																	>99%							>99%													
Physical Parameters																																								
Dimensions (LxHxW) mm	310x330x115			310x330x172			310x330x115				310x330x172							385x453.39x177.13						380x 453x 190	400x520 x240		485x630x270					520x700x270			577x 838x 323	577x 838x 323	
Weight (Kg)	6			11			6				11							18						18	31		38		68			80			83			
Enclosure Color	PANTONE Cool Grey3 C																	PANTONE Cool Grey3 C																					
Color Thickness	100-250μ (Micron)																	100-250μ (Micron)																					
General Data																																								
Operating Temperature	-25° to +60°																	-25° to +60°																					
Operating Surrounding Humidity	0-100%																	0-100%																					
Design Life	Over 25 Years																	Over 25 Years																					
Night Con. (W) / Noise Level	<0.2/<30dB																	<1W/<30dB																					
Heat Dissipation	Natural Convection																	Natural Convection							Intelligent Forced Cooling + Natural Convection													
RH / Max. Altitude	0% to 98%. No Condensation / <2000 Without Power Derating																	0% to 98%. No Condensation / <2000 Without Power Derating																					
Display	Graphical-LED With LCD Display																	Graphical-LED With LCD Display																					
DC / AC Connectors (IP-65)	MC-4																	MC-4																					
Communication Interface	WIFI / GPRS / RS 485 / RS 232 / ETHERNET LAN																	WIFI / GPRS / RS 485 / RS 232 / ETHERNET LAN / Local Monitoring																					
Standard Warranty	5 Years (Extendable Upto 10 Year)																	5,7 Years (Extendable Upto 10 Years)							7 Years (Extendable Upto 10 Years)													
Standards, Safety & Protections																																								
DC Switch	Optional																	Inbuilt																					
SPD (Surge Protection Device)	Type - 3 SPD (With GDT Optional)																	Type-3 SPD (With GDT Optional)																				Type-2 / Type-3 SPD / GDT		
MPPT Efficiency	IEC 61683																	IEC 61683																					
Inverter Efficiency	IEC 61683																	IEC 61683																					
Over Voltage Category	IEC 62109-1																	IEC 62109-1																					
Safety Standard	IEC 62109-1&2																	IEC 62109-1&2																					
EMC Standard	IEC 61000-6-1/2/3/4																	IEC 61000-6-1/2/3/4																					
Emnvironment Protection	IEC 60068-2-1/2/14/15																	IEC 60068-2-1/2/14/15																					
Anti-Islanding	IEC-62116																	IEC-62116																					
Ingress Protection	IP 65																	IP 65																					
Protection & Safety	PV Lightening, DC Input Short Circuit, DC O/V & U/V, Insulation Resistance Detection, RCCB / ELCB, Output Over / Under Voltage, Output Over Current, Output Over / Under Frequency, Over Temperature, GDT (Optional), SPD As Per Requirement Type-1&2, AC Output PF Control, AC Output Power Control By Using External Limiter For Zero Export Protection, Defined Remote Grid Monitoring Setting & Anti-Islanding.																																							

CS SERIES INVERTERS

CITIZEN SOLAR
solarising the nation

CS SERIES SINGLE PHASE ON-GRID PV INVERTER (1KW/2KW/3KW/4KW/5KW/6KW)`

- 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 based connectivity on smartphone
- Die-cast aluminium enclosure

CS SERIES THREE PHASE ON-GRID PV INVERTER (5KW/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 aluminium 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
- Integrated DC/AC surge protection
- Natural cooling technology without external fans
- Intelligent monitoring of 6 strings with fast fault detection
- APP designed for Wifi/GPRS based connectivity on smartphone

CS SERIES THREE PHASE ON-GRID PV INVERTER (50KW/60KW/70KW/80KW/90KW/100KW/110KW)

- 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

CITIZEN SOLAR
solarising the nation

Branch Office : Shop 34 City Centre Arcade, opp. Torrent Power Limited, Naroda Patiya, Ahmedabad, Gujarat 382345

Factory : New Survey No.966, Village : Indrad, Chhattral - Kadi Road, Ta. Kadi, Dist. Mehsana, Gujarat-382715.

Vadodara Branch:13 Radhaswami Society ,Opp. Shiv Vatika Warasia Ring Road Vadodara -390006

8460728007 , 9173236328

Follow us :