



VISTARA

SOLAR

**SOLAR EPC AND
MANUFACTURING**



**SMART
SOLAR
SOLUTIONS**



INTRO

Vistara Solar is a pioneer in the field of Solar EPC and manufacturing of solar modules. Entrenched in May 2025, Vistara Solar is dedicated to revolutionize the renewable energy sector through the production of high-quality, durable, and efficient solar panels and setting up solar plants for MW Scale and Commercial & Industrial customers. At Vistara Solar we understand the need of the hour to reduce dependency on fossil fuels. Our Solar PV modules use the power of the sun to generate clean, renewable energy, which offers not only environmentally friendly but also cost-effective solutions for residential, commercial, and industrial applications as well.

We aim to collaborate in smart & intelligent ways in bringing together the talents that yield the best possible results which are effective in harnessing the energy sector. Our Solar systems are suitable for a wide range of uses, including large-scale commercial projects and residential rooftops. Vistara focuses on 100% quality. Our dedicated team is committed to deliver top-quality power solutions that ensure uninterrupted power supply and offer peace of mind during outages.

Changing the face of India

Site Audit

System Design

Monitoring & Maintenance

Govt. Compliance

Utility Interconnection

Installation

Final Inspection & Commissioning

EPC SOLUTIONS

One-stop for all your solar power needs.

Residential and Commercial Solar Rooftop Solutions.
Complete turnkey services for solar systems.
Grid-tied (On-Grid) System.

Our Service

Rooftop Solar System Installation Grid-tied Solar System with net metering, gross metering, or zero export options.
PV modules, inverters, and other solar equipment.



Better Performance in Low Light
Conditions Performance



Excellent Module Efficiency
with Automation



Positive Power Tolerance
With Current Binning to Prevent
Mismatch Losses



Pre and Post EL Checking with High
Resolution Camera



IP68 Junction Box for long
Term Endurance



100% High Voltage Testing
to Ensure Safety

Save More. Power More. Go Solar with Oswal.



WE PROVIDE...

On-grid large-scale utility systems
On-grid rooftop systems for residential, industrial,
and commercial use
Floating solar power applications



CALL NOW: +91 7304040777, 8968886689

Our Solar Modules

MONO PERC HALF-CUT VISTARA 500 WP - 555 WP

Mono Facial M10

MONO PERC HALF-CUT VISTARA 500 WP - 555 WP

Bi-facial M10

TOP CON N TYPE VISTARA 590-600 WP



Our Services



24*7 Customer care access support operation



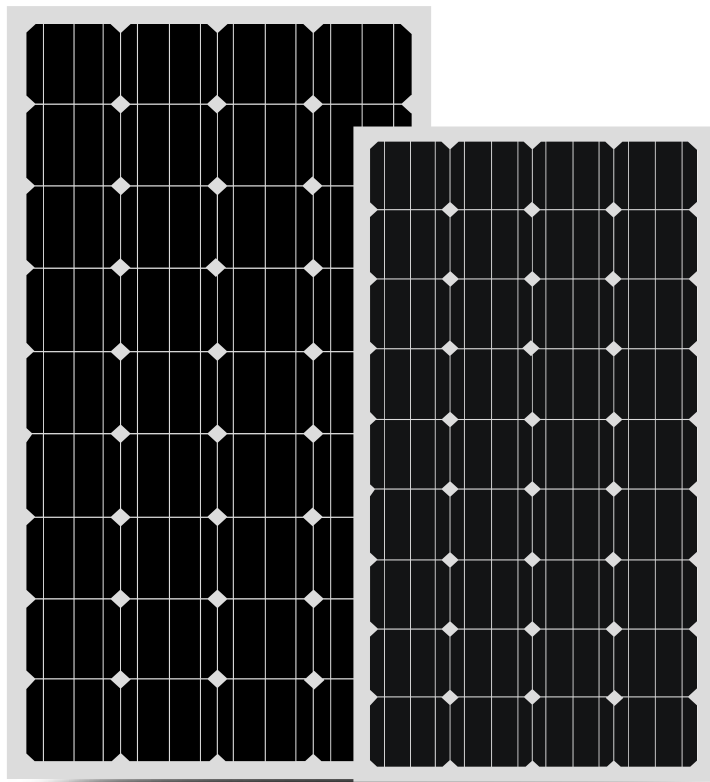
Single point of support for customer



Technical support



Onsite service Solutions



VISTARA SOLAR MODULES MONO PERC HALF-CUT 500 Wp - 555 Wp

Mono-Facial M10

THE INDUSTRY'S BENCHMARK

Vistara Solar is an internationally renowned leading solar energy cost effective befitting solutions provider having core competency in high efficiency PV module manufacturing and providing wide range EPC solutions. PV modules are the best in class in terms of power output and long-term reliability.

PRODUCT CERTIFICATE

 IEC CB Scheme	 IEC 61215 Design Qualification	 IEC 61730-1 / 2 Safety Qualification	 IS 14286 BIS Qualification	 QUALITY APPROVED Better Performance
 ISO 9000 Certified Mfg. Process	 ISO 14000 Environmental Mgt. System	 MBB - Cell	 Split type - JS	 Better Performance

MADE IN INDIA



27 Years Warranty for
linear performance



Product warranty on
materials and workmanship

PRODUCT | KEY FEATURES



Anti-Reflective (AR) coated glass to enhance solar energy



Excellent module efficiency with Passivated Emitter Rear Cell (PERC) to achieve higher energy conversion efficiency



Positive power tolerance with current binning to prevent mismatch losses



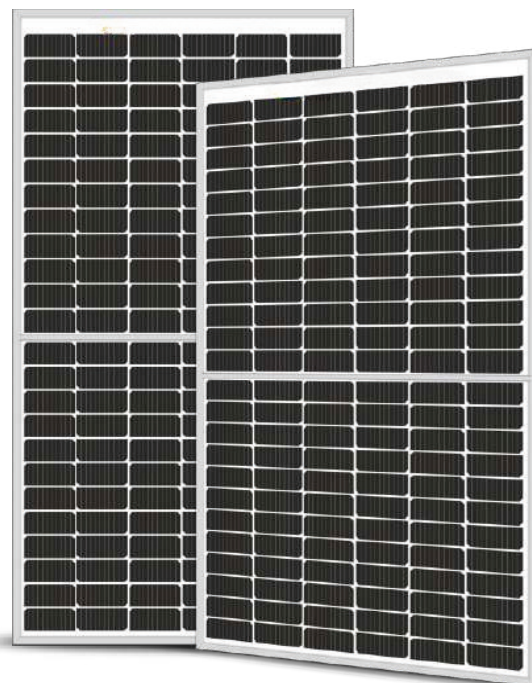
Pre-&Post electroluminescence (EL) High-Resolution Camera to detect hidden defects in the structure of PV Panels such as cell cracks and diode failures



Hi-Pot test requires to assess the stress on electrical equipment for safety and quality considerations



Multi-Busbar (MBB) half-cut cell technology brings stronger resistance to shade and lower risk of hot spot



VISTARA SOLAR

TECHNICAL DATA

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC) (Irradiance of 1000 W/m², spectrum AM 1.5, and cell temperature of 25°C)

Nominal Maximum Power (Pmax)	540W	545W	550W
Power Tolerance	+ 4.99 W, - 0W	+ 4.99 W, - 0W	+ 4.99 W, - 0W
Optimum Operating Voltage (Vmp)	41.86 V	42.01 V	42.14 V
Optimum Operating Current (Imp)	12.91 A	12.98 A	13.07 A
Open Circuit Voltage (Voc)	49.78 V	49.91 V	50.06 V
Short Circuit Current (Isc)	13.53 A	13.59 A	13.65 A
Module Efficiency	20.94 %	21.10 %	21.32 %
Fill Factor	80.17 %	80.35 %	80.48 %

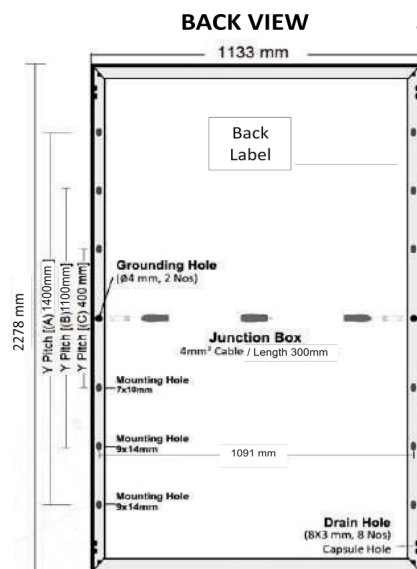
Note: Power measurement uncertainty: <±3%

PERFORMANCE UNDER NOCT (NOCT irradiances of 800 W/m², ambient temperature of 20°C, Wind speed 1m/s, Average NOCT = 45.25 °C)

Maximum Power (Pmax)	406.7 W	410.4W	412.2 W
Optimum Operating Voltage (Vmp)	38.5 V	38.7 V	38.94 V
Optimum Operating Current (Imp)	10.56 V	10.59 V	10.62 V
Open Circuit Voltage (Voc)	46.5 V	46.7 V	46.83 V
Short Circuit Current (Isc)	11.16 A	11.22 A	11.15 A

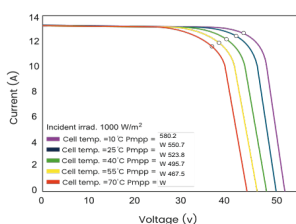
Mechanical Specifications

Dimensions (L x W x T in mm)	2278 x 1133 x 35
Weight (Kg)	27.2
Cell Type / No. Of cell	Mono PERC Half-Cut/144 Cell (12*6, 12*6)
Frame	Silver Anodized Aluminum Alloy (6005, Temper T6, Silver Colour)
Front Cover	ARC Coated Low-Iron Tempered Glass (3.2 mm Thick)
Encapsulate	Ethylene Vinyl Acetate (EVA) Sheet - PID free and UV Resistant
Back Sheet	Fluoro-polymer Based Composite Film / Polymer Based Composite Film
Junction Box	Split Junction Box (3 units with bypass diode) - Weatherproof (IP68), MC4 Compatible Connectors
Cable	4 sq. mm, 300 mm. / 400 mm. Length (As per Customer Requirement)
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, [B] 1100, [C] 400
Mounting Holes Pitch (X)-mm	1091

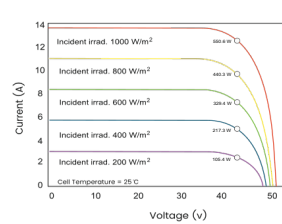


SIDE VIEW

IV Curve Varies with Temperature

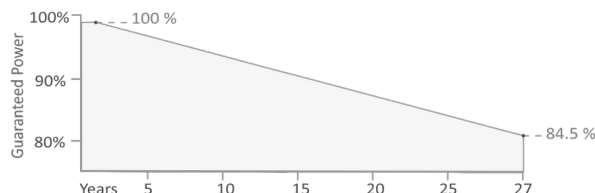


IV Curve Varies with Irradiance



* I-V curves shown for front-side illumination of 550 Wp panel.

LINEAR PERFORMANCE WARRANTY



*All dimensions are in mm with ± 2 mm tolerance

graphics shown here in above are reference purpose only

MAXIMUM OPERATING CONDITIONS

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

TEMPERATURE COEFFICIENTS

Current α(Isc) :	0.0271 %/ °C
Voltage β(Voc) :	-0.2355 %/ °C
Power γ(Pmax) :	-0.3164 %/ °C

STACKING STANDARD

	19FT	32FT
No. of Modules	224 Nos	448Nos
No of Pallets	8 Pallets	16 Pallets
Modules per Pallet / Weight	28 Nos/800 Kgs.	28 Nos/800 Kgs.
Pallet dimensions	2300*1010*1210	2300*1010*1210

Caution: Please read the safety and installation instructions before using this product.

Warranty: Linear power warranty for 30 years, with degradation of up to 2% in the first year and 0.6% per year from year 2 to year 30. Please read the Oswal warranty documents thoroughly.

Disclaimer: Specifications included in this datasheet are subject to change without prior notice due to ongoing innovation in product development and R&D activities. OSWAL SOLAR reserves the right to make any adjustments to the information described here. The data contained in this specification do not represent the performance of an individual module. T&C apply.

Solar Energy Solutions



Industrial
Solar



Residential
Rooftop Solar



Solar R&D
Support System



Solar Business
Models



AC Solar
Plants



Agriculture Solar
(Water Pumps)



Agricultural Solutions
(VFD-based Flour Mill,
Oil expellers, and Others)



Commercial Solar

VISTARA SOLAR

Mono Half Cut Bi Facial

VISTARA SOLAR
Top Con N Type

Big Power, Bold Technology.

OUR TOPCON SOLAR PANEL

TOPCON



Better Performance in Low Light
Conditions Performance



Excellent Module Efficiency
with Automation



Positive Power Tolerance
With Current Binning to Prevent
Mismatch Losses



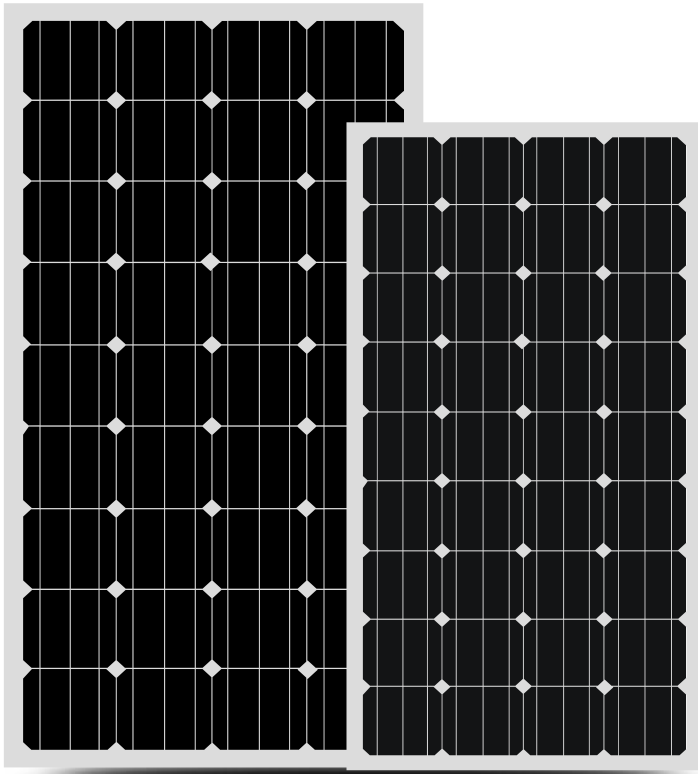
Pre and Post EL Checking with High
Resolution Camera



IP68 Junction Box for long
Term Endurance



100% High Voltage Testing
to Ensure Safety



TOPCON SOLAR PANEL 575W & 590W

(Bi-Facial Dual Glass)

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MADE IN INDIA



27 Years Warranty for
linear performance



Product warranty on
materials and workmanship

PRODUCT | KEY FEATURES



Half Cut Cells Are More Physically Durable, More Resistant To Cracking Reduce Power Loss increase module efficiency (Topcon up to 23%)



Lower degradation rate, ensure consistent power over longer lifespan



16BB instead of 10MBB Technology decreases the distance between bus bars and finger grid line which is benefit to power increase.



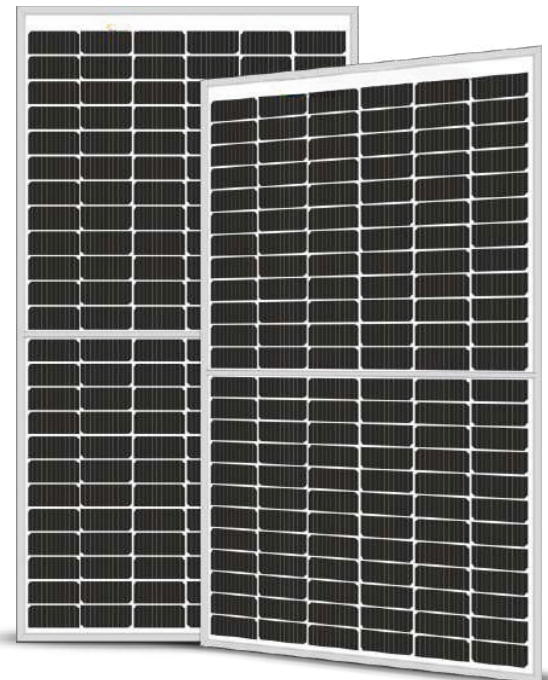
Lower Temperature Coefficient



Higher bifacially, allowing for increased power generation



IP68, IP67
for Long Term Endurance



TECHNICAL DATA

TOPCON SOLAR PANEL

575W & 590W (Bi-Facial Dual Glass)

TECHNICAL DATA

Electrical Parameter at STC	Bifacial N-Type Module	
Module Type	UTL575-144GT	UTL590-144GT
Capacity rating – Pmax(Wp)	575	590
Power Tolerance	±2%	
Rated voltage - Vmp(V)	44.0	44.27
Rated current - Imp(A)	13.07	13.33
Short circuit current - Isc(A)	13.90	14.24
Open circuit voltage - Voc(V)	51.20	51.52
Module efficiency (%)	22.28	22.87

Under Standard Test Conditions (STC) of irradiance 1000 W/m², spectrum AM 1.5 and Module temperature of 25°C. Except Pmax, all other parameters have a tolerance of ±3%.

ELECTRICAL CHARACTERISTICS WITH 10% REAR SIDE POWER GAIN#

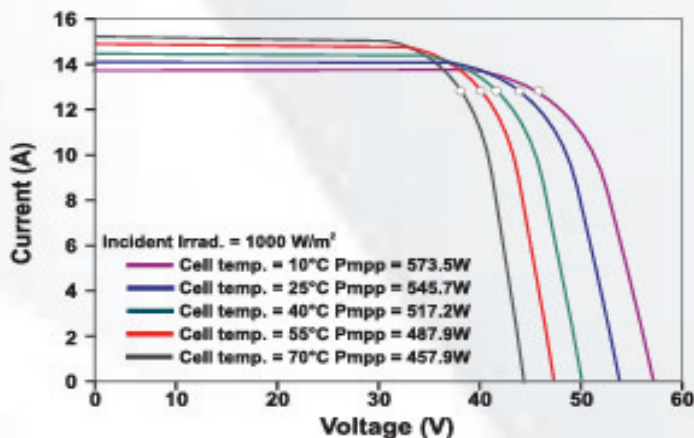
Capacity rating – Pmax(Wp)	632	649
Short circuit current - Isc(A)	15.29	15.66
Open circuit voltage - Voc(V)	56.32	56.67
Rated current - Imp(A)	14.37	14.66
Rated voltage - Vmp(V)	48.40	48.69

Additional power gain from rear side compared to power of front side at STC depends on mounting structure (height, tilt angle etc.) and reflectivity of ground.
Bi-Faciality Factor : 80 ± 5 %

MECHANICAL SPECIFICATION

Solar cells	144 pcs TOPCon cell technology, Multi BB
Encapsulation	PID & UV resistance
Frame	Silver Anodized Aluminium Alloy
Front Glass	2.0 mm, High Transmission, AR Coated Semi Tempered Glass
Back Glass	2.0 mm, Heat Strengthened Glass
Dimensions	(L) 2277 mm x (W) 1133 mm x (H) 35 mm*
Weight	~32.5 Kg
J-box	IP 68 certified, 3 diodes, Split junction box
Series Fuse Rating	30 A
Cable	4 mm ² , Solar cable 400 mm/1400mm length or Customized length
Connectors	MC4 Type
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C (Type 1)
Surface load	Snow load 5400 Pa, Wind load 2400 Pa

I-V Curve at STC



PERMISSIBLE OPERATING CONDITIONS

Temperature range	-40°C to +85°C
NOCT	45 ± 2°C
Maximum system voltage	1500 VDC
Hail resistance	Max. diameter of 25 mm with velocity 23 m/s

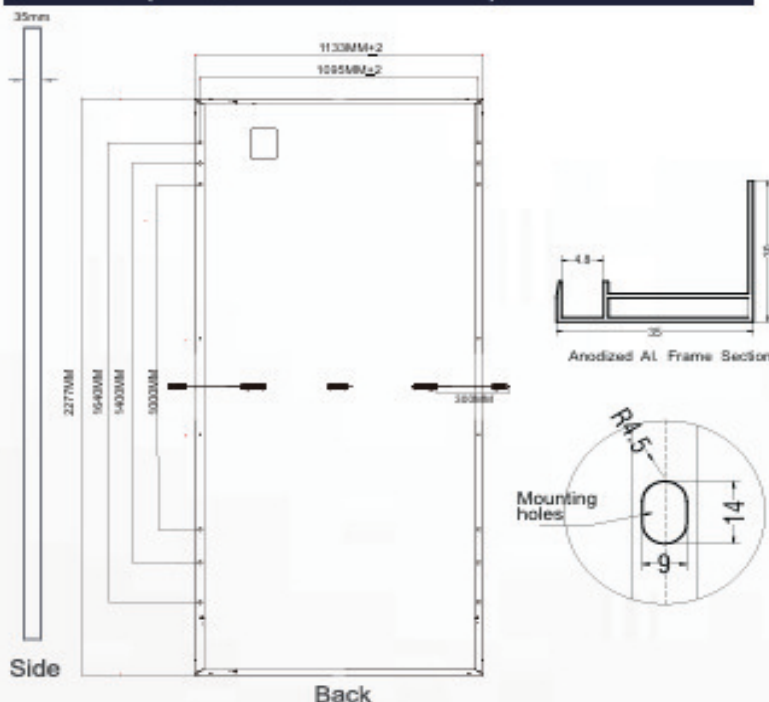
TEMPERATURE COEFFICIENTS (TC)

Temperature Coefficient (Voc)	-0.26% /°C
Temperature Coefficient (Isc)	0.045% /°C
Temperature Coefficient (Pmax)	-0.32% /°C

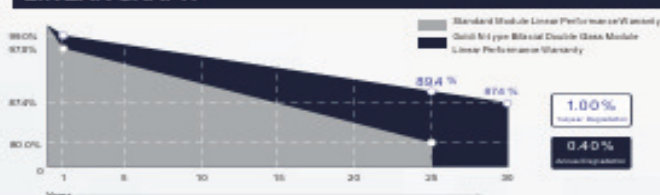
PACKAGING CONFIGURATION**

No of pallet	20
No of module, 40ft HC container	720
Number of Modules per Pallet	28

DRAWING (MEASUREMENTS ARE IN MM)



LINEAR GRAPH



WARRANTY

10 Years - 90% of Power O/P	17 Years - 80% of Power O/P
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