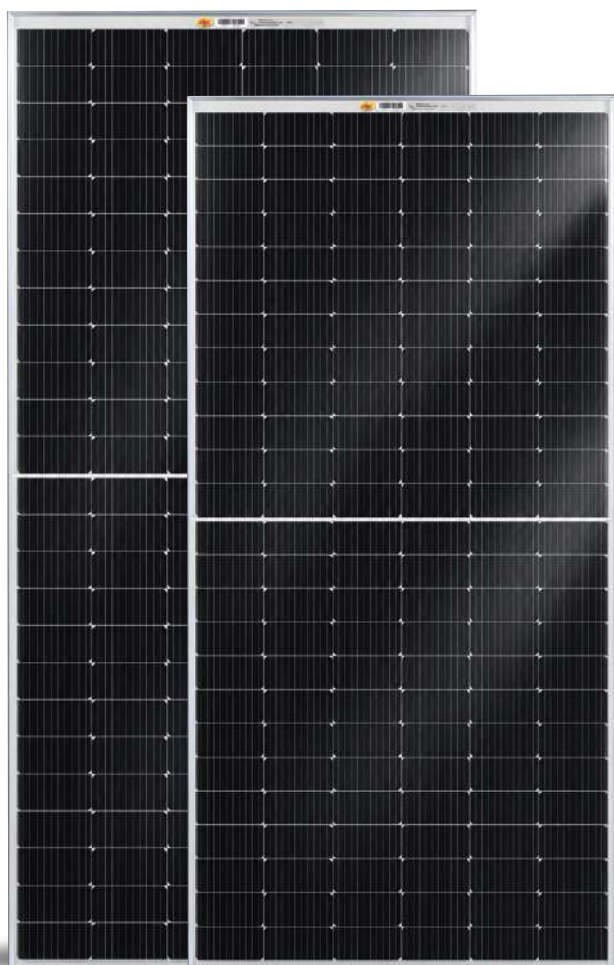




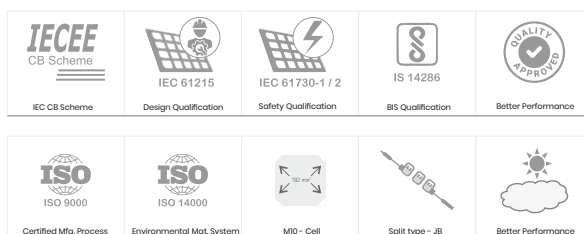
OSWAL SOLAR MODULES MONO PERC HALF-CUT 505 Wp - 560 Wp

Bifacial Modules

THE INDUSTRY'S BENCHMARK

Oswal 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 CERTIFICATES



MADE IN INDIA

27 YEARS 27 Years Warranty for linear performance

12 YEAR 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
-  IP68 Junction Box ensures long-term endurance, even in harsh environmental conditions
-  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

OSWAL SOLAR



TECHNICAL DATA

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: <±3%. Average value of NOCT: 45°C]

ELECTRICAL CHARACTERISTICS*	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	520 W	389 W	540 W	412 W	545 W	410.4 W	550 W	412W
Optimum Operating Voltage (Vmp)	41.02 V	38.895 V	42.34 V	40.147 V	42.65 V	38.70 V	42.984 V	40.757 V
Optimum Operating Current (Imp)	12.68 A	10.227 A	12.76 A	10.292 A	12.78 A	10.59 A	12.8 A	10.324 A
Open Circuit Voltage (Voc)	47.858 V	45.379 V	48.97 V	46.433 V	49.24 V	46.70 V	49.60 V	47.038 V
Short Circuit Current (Isc)	13.33 A	10.751 A	13.45 A	10.848 A	13.48 A	11.22 A	13.52 A	10.905 A
Module Efficiency	20.13 %		20.90 %		21.10 %		21.29 %	
Fill Factor	80.53 %		80.03 %		82.11 %		82.03 %	

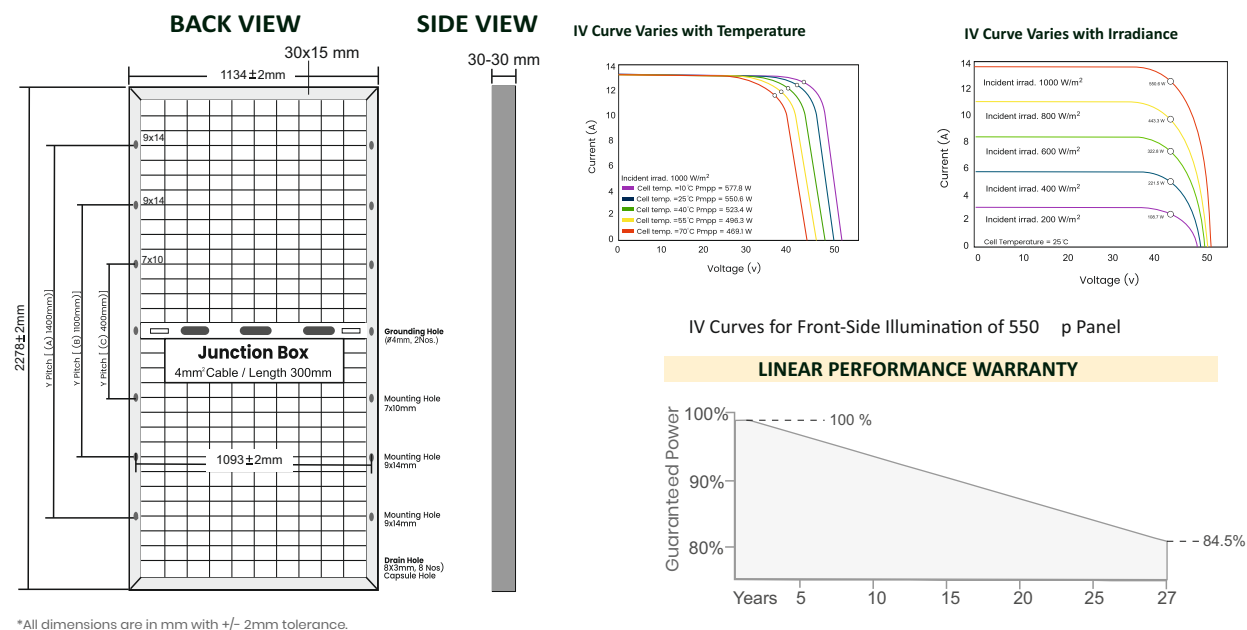
BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 80% ± 10%]

[Note: The bifacial gain depends on the power plant design and conditions. Electrical component ratings should be selected based on the actual bifacial gain at the site (module currents indicated below).]

15%	Nominal Maximum Power (Pmax)	598 W	621 W	627 W	633 W
	Module Efficiency	23.15 %	24.04 %	24.26 %	24.48 %
20%	Nominal Maximum Power (Pmax)	624 W	648 W	654 W	660 W
	Module Efficiency	24.16 %	25.08 %	25.32 %	25.55 %
25%	Nominal Maximum Power (Pmax)	650 W	675 W	681 W	688 W
	Module Efficiency	25.16 %	26.13 %	26.37 %	26.61 %

Mechanical Specifications

Dimensions (L x W x T in mm)	2278 x 1134 x 30
Weight (Kg)	26.5 kg ± 0.4 kg
Cell Type / No. Of cell	Mono PERC Half-Cut Bifacial /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	1093±2mm



*All dimensions are in mm with +/- 2mm tolerance.

*graphics shown herein above are reference purpose only.

MAXIMUM OPERATING CONDITIONS		TEMPERATURE COEFFICIENT		STACKING STANDARD	32FT	40FT
Operating Temperature :	-40°C to +85°C	Current α(Isc) :	0.041%/°C	No. of Modules :	512 Nos	704 Nos
Maximum System Voltage :	1500V	Voltage β(Voc) :	-0.259%/°C	No of Pallets:	16 Pallets	22 Pallets
Maximum Series Fuse Rating :	25A	Power γ(Pmax) :	-0.320%/°C	Modules per Pallet / Weight :	32 Nos/886 Kgs.	32 Nos/886 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 27 years, with degradation of up to 2.5% in the first year and 0.5% per year from year 2 to year 27. 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. 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.