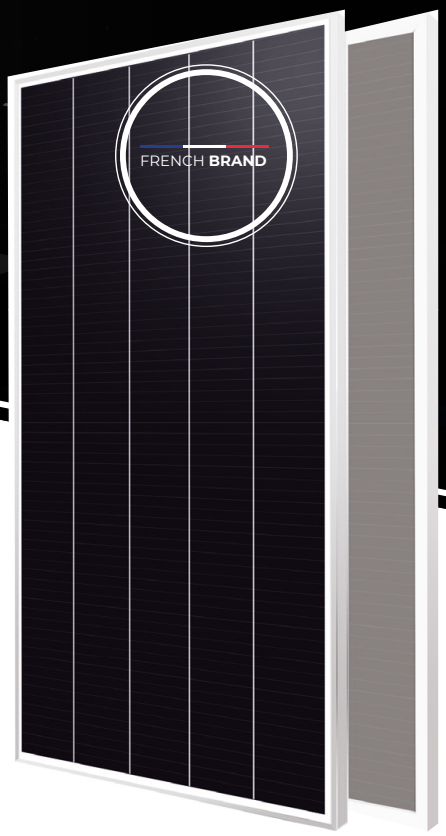
OPENAX

BIFACIAL MONO CRYSTALLINE DOUBLE GLASS MODULE - SHINGLED CELL TECHNOLOGY

530 / 535 / 540 / 545 / 550 / 555 Watts



Shingled Series

Overview

Shingled technology eliminates traditional ribbon connection with shingles connected series. By removing the soldered ribbons, The active area of the module is improved and thermal stresses are reduced-resulting in exceptional efficiency and reliability over standard interconnections.

- Guaranteed mechanical resistance to severe weather conditions
- Positive Tolerance
- 100 % electroluminescence tested

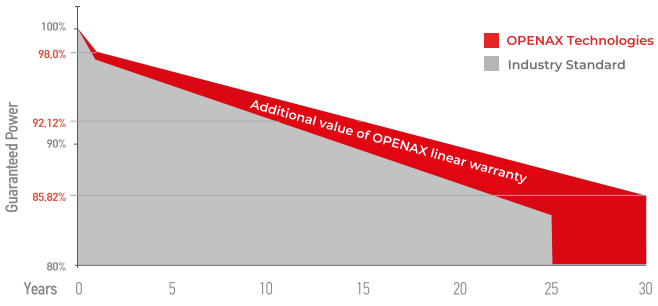
Key benefits

- Zero Light Induced Degradation
- 0% Front Grid Shading Loss
- Low LCOE
- 25 Years Limited Product Warranty
- LowPmax Temperature Coefficient
- Higher Light Conversion

Tests, Certifications and Guarantees

Standard tests	IEC 61215, IEC 61730
Factory quality testing	ISO 9001: 2015. ISO 14001: 2015
Certifications	Conformity to CE. PV CYCLE Fire safety Class C according to UNI9177
Wind and Snow Loads Testing	Module certified to withstand extreme wind [2400 Pascal] and snow loads [5400 Pascal]
Withstanding Hail	Maximum Diameter of 25mm with impact speed of 23m/s
Power Tolerance	Guaranteed +0/+5W [STC condition]
Warranties	✓ 30-year limited product warranty ✓ 15-year manufacturer warranty on 94, 10% of the nominal performance ✓ Linear power output guarantee over 25 years

Linear performance guarantees



Production 1st year	≥ 98.0%	Power between 2 and 25 years	≤ 0.42%	Power output at 25 years	≥ 85.82%

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BIFACIAL N-TYPE MONO CRYSTALLINE DOUBLE GLASS MODULE - SHINGLED CELL TECHNOLOGY

OX-xxx-G12SHGBVB(xxx=530-555)

Electrical performance

POWER CLASS [1]			530		535		540		545		550		555	
Measurement condition			STC [2]	NMOT[3]	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power	Pmax	[Wp]	530	398	535	401	540	405	545	49	550	413	555	416
Voltage at Pmax	Vmp	[V]	38,8	37,0	38,8	37,0	38,9	37,1	39,0	37,2	39,1	37,3	39,2	37,3
Current at Pmax	Imp	[A]	13,67	10,76	13,79	10,84	13,98	10,92	13,98	10,99	14,07	11,07	14,17	11,15
Open Circuit Voltage	Voc	[V]	64,7	44,4	46,8	44,5	46,9	44,6	47,0	44,7	47,1	44,8	47,2	44,9
Short circuit current	Isc	[A]	14,56	11,72	14,65	11,80	14,76	11,89	14,86	11,97	14,97	12,06	15,07	12,14
Surface efficiency	Eff	[%]	20,3		20,5		20,7		20,9		21,0		21,2	
Max. Reverse Current	Ir	[A]	30											
System voltage max	Vsys	[V]	1500V CD (IEC)											

(1) Measurement tolerances: Pmax (± 3%), Isc & Voc (± 3%) - Power classification 0/+5W
(2) STC (Standard Test Conditions): Irrandiance 1000W/m2 Cell Temperature 25°C, AM 1.5
(3) NMOT (Nominal Module Operating Temperature): Irrandiance 800W/m2 Ambient Temperature 20°C, AM

Bi Facial Output (4)

POWER CLASS			530		535		540		545		550		555	
			Pmax (Wp)	Eff (%)	Pmax (Wp)	Eff (%)	Pmax (Wp)	Eff (%)	Pmax (Wp)	Eff (%)	Pmax (Wp)	Eff (%)	Pmax (Wp)	Eff (%)
Power with Backside Gain	+5	(%)	556,5	21,3%	561,8	21,5%	567,0	21,7%	572,3	21,9%	577,5	22,1%	582,8	22,3%
	+10	(%)	583,0	22,3%	588,5	22,5%	594,0	22,7%	599,5	22,9%	605,0	23,2%	610,5	23,4%
	+15	(%)	609,5	23,3%	615,3	23,5%	621,0	23,8%	626,8	24,0%	632,5	24,2%	638,3	24,4%
	+20	(%)	636,0	24,3%	642,0	24,6%	648,0	24,8%	654,0	25,0%	660,0	25,3%	666,0	25,5%
	+25	(%)	662,5	25,4%	668,8	25,6%	675,0	25,8%	681,3	26,1%	687,5	26,3%	693,8	26,6%
	+30	(%)	689,0	26,4%	695,5	26,6%	207,0	26,9%	708,5	27,1%	715,0	27,4%	721,5	27,6%

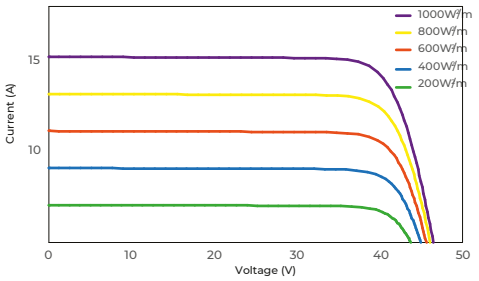
(4) Bifaciality Factor > 90% - Back-side power gain depends upom the specific projet albedo - Efficiency is according to the module

Mechanical characteristics

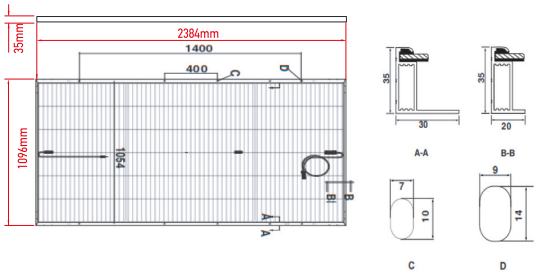
Dimensions	2384mm x 1096 x 35mm
Weight	32,5 Kg
Cells	PERC Mono - 210x35mm - 345pcs - G12
Front panel	2.0mm Tempered and low iron glass + ARC
Rear panel	2.0mm Tempered and low iron glass
Frame	Anodized aluminum alloy
Junction box	IP68 - 3 Bypass Diodes
Connectors	MC4 Compatible
Cables	Cross-section: 4mm², +300mm/-1000mm(V), +220/-180mm(H) or customized

I-V curve

Power loss in low-light environments: 200W/m is less than 3%.



Dimensions



Thermal coefficients

Coeff./ Pmax	-0.34% /°C
Coeff./ Voc	-0.27% /°C
Coeff./ Isc	+0.04 % /°C
Operating temperature	-40~+85 °C
Nominal module operating temperature (NMOT)	42.3 ± 2 °C

Packaging configuration

Container	40' (HC)
Pieces per Pallet	31
Pallets per Container	20
Pieces per Container	(31 +31) x10=620 pcs

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