

Atlas

PERC 182MM Bifacial Transparent Backsheet Module

520-555W



Lightweight Quality

Experience the freedom of lightness with our transparent back sheet model.



Superior Hail Resistance

Our transparent back sheet provides superior hail resistance for a solar solution that withstands the harshest weather conditions.



Customizable All-Black Modules

Elevate the aesthetics of your solar installation with our customizable all-black modules.



Customized Configuration

Tailor your solar solution to fit any scenario with our range of 4 size options with various of No. of cells.

Pmax:

555W

Power range:

520-555W

Efficiency:

21.5%

Warranty:

25 years

Annual degradation:

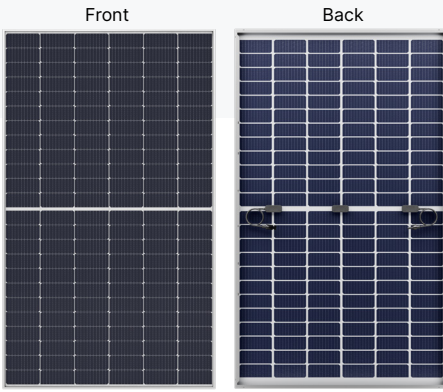
0.55%

Product Certification



Reliably Built.

Imperial Star is a solar manufacturer committed to empowering PV excellence in America. With a rich, 10-year manufacturing legacy, Imperial Star delivers 3 GW of PV Module capacity through its integrated and dependable supply chain.



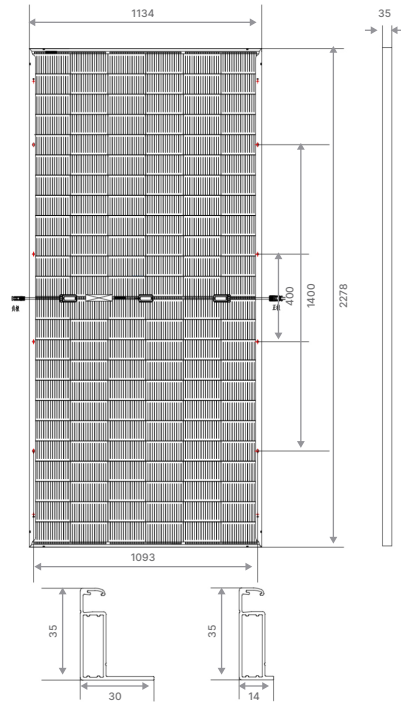
555W
Maximum Power Output

21.5%
Module Efficiency

25 Year
Power Output Warranty

12 Year
Product Warranty

Engineering Drawing



- Anti-reflection coating and self-cleaning glass
- Special cutting and soldering technology leads to low hotspot risk
- Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail trail free
- Optimized system performance due to module level current sorting
- Highly transparent self-cleaning glass brings additional yield and easy maintenance

Item	W	ISM7-SHDB144-530/M		ISM7-SHDB144-525/M		ISM7-SHDB144-530/M		ISM7-SHDB144-535/M		ISM7-SHDB144-540/M		ISM7-SHDB144-545/M		ISM7-SHDB144-550/M		ISM7-SHDB144-555/M	
		STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Max. Power (Pmax)	W	520	389	525	392.4	530	396.2	535	399.9	540	403.6	545	407.4	550	411.1	555	414.8
Opt. Operating Current (Imp)	A	12.66	10.14	12.74	10.21	12.81	10.26	12.88	10.32	12.96	10.38	13.03	10.44	13.1	10.49	13.18	10.56
Opt. Operating Voltage (Vmp)	V	41.09	38.3	41.24	38.48	41.39	38.62	41.54	38.76	41.69	38.90	41.84	39.04	41.99	39.18	42.14	39.32
Short Circuit Current (Isc)	A	13.63	10.99	13.69	11.04	13.75	11.09	13.81	11.14	13.87	11.19	13.93	11.23	13.99	11.28	14.05	11.33
Open Circuit Voltage (Voc)	V	48.88	46.0	49.03	46.10	49.18	46.24	49.33	46.38	49.48	46.52	49.63	46.66	49.78	46.80	49.93	46.94
Module Efficiency		20.2%		20.3%		20.5%		20.7%		20.9%		21.1%		21.3%		21.5%	
Module Power Tolerance		0~+3%															
Operating Temperature		-40°C~+85°C															
Max. System Voltage		1500VDC (IEC)															
Max. Nominal Fuse Current		30A															
Application Level		A															
STC		Irradiance 1000W/m ² , Module temperature 25°C, AM 1.5															
NOTC		Irradiance 800W/m ² , Module temperature 20°C, AM 1.5, Wind speed 1m/s															

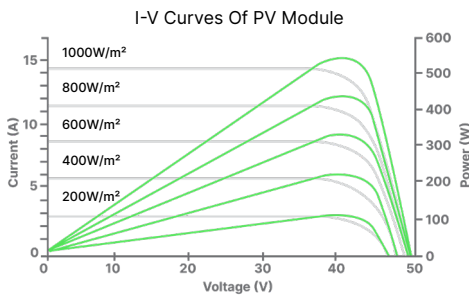
Temperature Characteristics	
Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient (Pmax)	-0.35%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	+0.045%/°C

Mechanical Data	
Dimensions	2278 × 1134 × 35 mm
Weight	28.5±0.5kg
Module composition	144 (6*24)
Front glass thickness	3.2 mm high transparency, AR coating, thermal reinforced glass
Frame material	Aluminum, silver anodized
J-Box	IP68, 3 diodes
Cable	Portrait: 300 mm; Landscape: 1400mm, 4mm ² / 12 AWG
Connector	MC Compatible / MCA-EV02 (optional)

Packaging Specifications	
Container	40HQ
Module quantity per pallet	31
Pallet quantity per container	20
Module quantity per container	620

Performance under low irradiation
Industry-leading performance under low irradiance conditions. The module efficiency of irradiance 200/m² is above 96.5% of the irradiance 1000W/m module efficiency.

Product Certification	
ISO 9001: Quality management system certification	CEC
ISO 14001: Environmental management system certificate	TUV
ISO 45001: International standards for occupational health and safety	CE
IEC 61215: Standards for durability	UL
IEC 61730: Standards for safety operation	



Warranty

