

Atlas

P-Type 182MM Monofacial Module 520-555W



Black or White Backsheet

Our mono-facial glass model offers the choice of black or white backsheet, adding a touch of customization to your energy setup



Affordable Solar Excellence

Our mono-facial glass model is the more economical option, delivering reliable solar power without compromising on performance



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 5 size options with various of No. of cells

Pmax:

555W

Power range:

520-555W

Efficiency:

21.5%

Warranty:

25 years

Annual degradation:

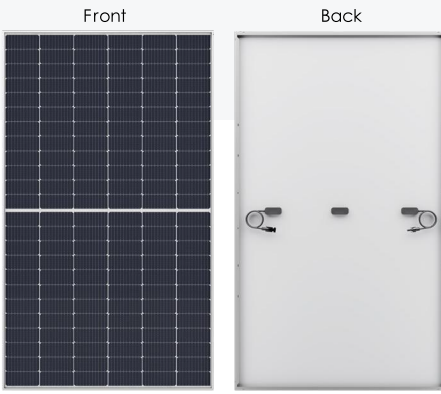
0.55%

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 6 GW of PV module capacity through its integrated and dependable supply chain by 2024.



555W

Maximum Power Output

21.5%

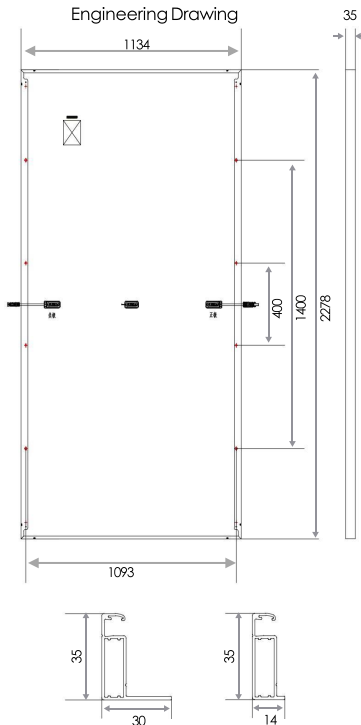
Module Efficiency

25 Year

Power Output Warranty

12 Year

Product Warranty



Anti-reflection coating and self-cleaning glass



Special cutting and soldering technology leads to low hotspot risk



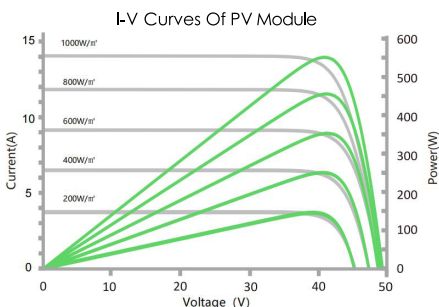
Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail-trail free



Optimized system performance due to module level current sorting



Highly transparent self-cleaning glass brings additional yield and easy maintenance



Item	ISM7-SHDD144-520M ISM7-SHDD144-525M ISM7-SHDD144-530M ISM7-SHDD144-535M ISM7-SHDD144-540M ISM7-SHDD144-545M ISM7-SHDD144-550M ISM7-SHDD144-555M																
	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	12.65	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	38.30	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	46.00	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		20.1%		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/m², Module temperature 25°C, AM 1.5															
NOTC		Irradiance 800W/m², 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 x 1134 x 35mm
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, 4mm² / 12 AWG
Connector	MC Compatible / MC4-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 200W/m² is above 96.5% of the irradiance 1000W/m² 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

