Atlas

P-Type 182MM Bifacial Transparent Backsheet Module 395-415W

Pmax:
415W

Power range:
395-415W

Efficiency:
21.3%

Warranty:
25 years

Annual degradation:
0.55 %

Light weight Quality

Experience the freedom of lightness with our transparent backsheet model

Superior Hail Resistance

Our transparent backsheet 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 5 size options with various of No. of cells

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.

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PV MODULE DATASHEET
ISM7-SHDB108-415/M

Front

Back

415W Maximum Power Output

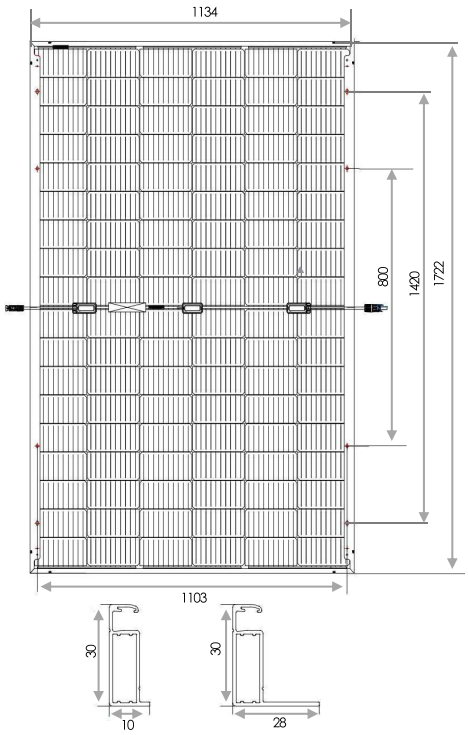
21.3% Module Efficiency

25 Year Power Output Warranty

12 Year Product Warranty

Item		ISM7-SHDB108-395M		ISM7-SHDB108-400M		ISM7-SHDB108-405M		ISM7-SHDB108-410M		ISM7-SHDB108-415M	
		STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Max. Power (Pmax)	W	395	295.2	400	299.0	405	302.7	410	306.5	415	310.2
Opt. Operating Current (Imp)	A	12.65	10.13	12.76	10.22	12.87	10.31	12.98	10.40	13.09	10.49
Opt. Operating Voltage(Vmp)	V	31.24	29.15	31.36	29.26	31.48	29.37	31.60	29.48	31.72	29.60
Short Circuit Current (Isc)	A	13.54	10.92	13.65	11.01	13.76	11.10	13.87	11.19	13.98	11.27
Open Circuit Voltage (Voc)	V	37.02	34.81	37.11	34.89	37.20	34.98	37.29	35.06	37.38	35.14
Module Efficiency		20.2%		20.5%		20.7%		21.0%		21.3%	
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, AM1.5									
NOTC		Irradiance 800W/m², Module temperature 20°C, AM 1.5, Wind speed 1m/s									

Engineering Drawing



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	1722 x 1134 x 30 mm
Weight	21±0.5kg
Module composition	108 (6*18)
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 / 12AWG
Connector	MC Compatible / MC4-EV02 (optional)

Packaging Specifications	
Container	40HQ
Module quantity per pallet	36
Pallet quantity per container	26
Module quantity per container	936

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

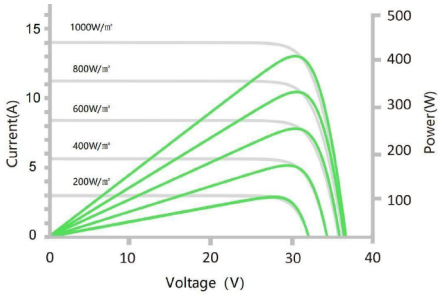
Performance under low irradiation

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

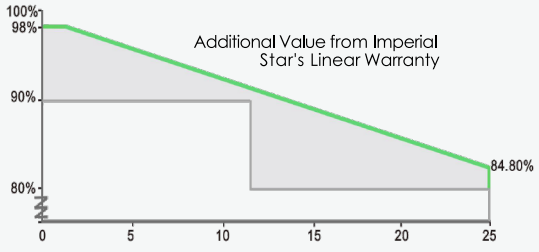
Product Certification

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	

I-V Curves Of PV Module



Warranty



12 Year Product Warranty

25 Year Linear Power Warranty