Atlas

PERC 182MM Monofacial Module

395-415W

Pmax:	Power range:
415W	395-415W
Efficiency:	Warranty:
21.3%	25 years
Annualdegradation:	
0.55%	

Customizable All-Black Modules

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

Affordable Solar Excellence

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

Decade of PERC Technology Excellence

Trust our modules for over 10 years of stability and reliable performance

Customized Configuration

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



Product Certification

Reliably Built.

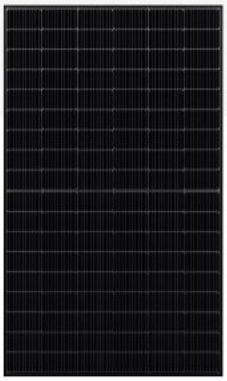
Imperial Star is a solar manufacturer committed to empowering PV excellence in America. With a rich, 10-year manufacturing legacy, Imperial Star delivers 6 GW of PV module capacity through its integrated and dependable supply chain by 2024.

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www.imperialstar.com

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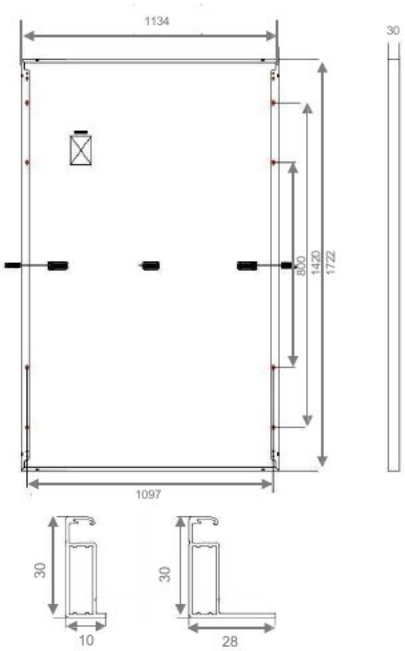
PV MODULE DATASHEET
ISM7-SHDD108-415/M_U001



415W	21.3%	25Year	25Year
Maximum Power Output	Module Efficiency	Power Output Warranty	Product Warranty

Item		ISM7-SHDD108-395M		ISM7-SHDD108-400M		ISM7-SHDD108-405M		ISM7-SHDD108-410M		ISM7-SHDD108-415M	
Max. Power (Pmax)	W	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
		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		25A									
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									

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 30mm
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, black anodized
J-Box	IP68, 3 diodes
Cable	Portrait: 300 mm; Landscape: 1400mm, 4mm² / 12AWG
Connector	MC Compatible / MC4-EVO2 (optional)

Domestic Content bom	
Name of the material	PV Cell

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

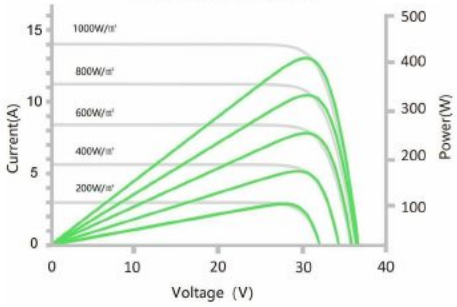
Highly transparent self-cleaning glass brings additional yield and easy maintenance

Performance under low irradiation

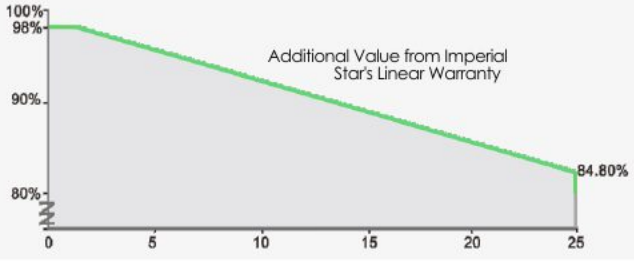
Industry-leading performance under low irradiance conditions. The module efficiency of irradiance 200/m² is above 96.5% of the irradiance 1000W/m² module efficiency.

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



25 Year Product Warranty

25 Year Linear Power Warranty

Specifications subject to technical changes - Updated4.8.24

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