

Atlas N

N-Type 182MM Bifacial Double Glass Module

410-435W



30% Bifacial Power Gain

Delivers an impressive 30% increase in power generation with an 80±5% bifacial rate, harnessing energy from both sides



Peak Efficiency 22.3%

Achieves a leading efficiency rate of 22.3%, maximizing solar power conversion



Advanced Cell Technology

Significant reductions in Light-Induced Degradation (LID) and Light and Elevated Temperature Induced Degradation (LETID), maintaining peak performance



Customized Configuration

Provides versatility with 5 size options to meet residential, commercial, or industrial solar energy needs

Pmax:

435W

Power range:

410-435W

Efficiency:

22.3%

Warranty:

30 years

Annual degradation:

0.40%

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.

435W

Maximum Power Output

22.3%

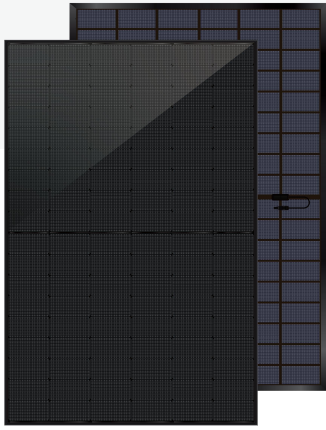
Module Efficiency

30 Year

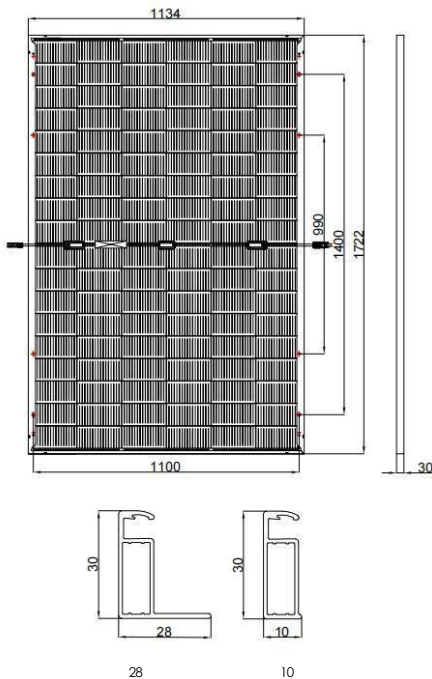
Power Output Warranty

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

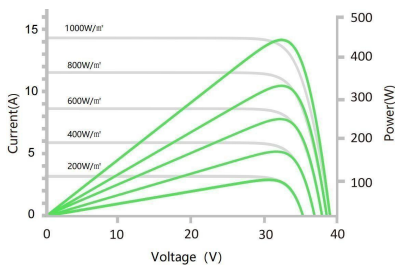


Optimized system performance due to module level current sorting



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

I-V Curves Of PV Module



Item		ISN7-UHSB108-410/M ISN7-UHSB108-415/M ISN7-UHSB108-420/M ISN7-UHSB108-425/M ISN7-UHSB108-430/M ISN7-UHSB108-435/M													
		STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Max. Power (Pmax)	W	410	306	415	310	420	314	425	318	430	321	435	325		
Opt. Operating Current (Imp)	A	410	306	13.18	10.55	13.25	10.61	13.33	10.68	13.40	10.73	13.47	10.79		
Opt. Operating Voltage (Vmp)	V	13.11	10.49	31.5	29.4	31.7	29.6	31.9	29.8	32.1	29.9	32.3	30.1		
Short Circuit Current (Isc)	A	31.3	29.2	13.95	11.25	14.01	11.30	14.07	11.35	14.13	11.40	14.19	11.44		
Open Circuit Voltage (Voc)	V	13.89	11.20	37.8	35.5	38.0	35.7	38.2	35.9	38.4	36.1	38.6	36.3		
Module Efficiency		21.0%		21.3%		21.5%		21.8%		22.0%		22.3%			
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													

Temperature Characteristics	
Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient (Pmax)	-0.3%/°C
Temperature Coefficient (Voc)	-0.24%/°C
Temperature Coefficient (Isc)	+0.037%/°C

Mechanical Data	
Dimensions	1722 x 1134 x 30mm
Weight	26±0.5kg
Module composition	108(6*18)
Front glass thickness	2.0mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Frame material	Aluminum, silveranodized
J-Box	IP68, 3 diodes
Cable	Cable length 500mm, 4mm² / 12AWG
Connector	MC Compatible / MC4-EV02(optional)

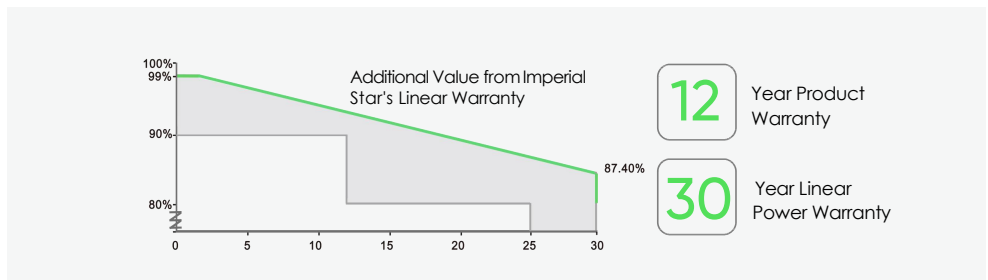
Packaging Specifications	
Container	40HQ
Module quantity per pallet	36
Pallet quantity per container	26
Module quantity per container	936

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 certification	TUV
ISO 45001: International standards for occupational health and safety	CE
IEC 61215: Standards for durability	UL
IEC 61730: Standards for safety operation	



Warranty



12 Year Product Warranty

30 Year Linear Power Warranty