

Atlas N

N-Type 182MM Bifacial Double Glass Module 610-640W



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 22.9%

Achieves a leading efficiency rate of 22.9%, 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:

640W

Power range:

600-640W

Efficiency:

22.9%

Warranty:

30 years

Annual degradation:

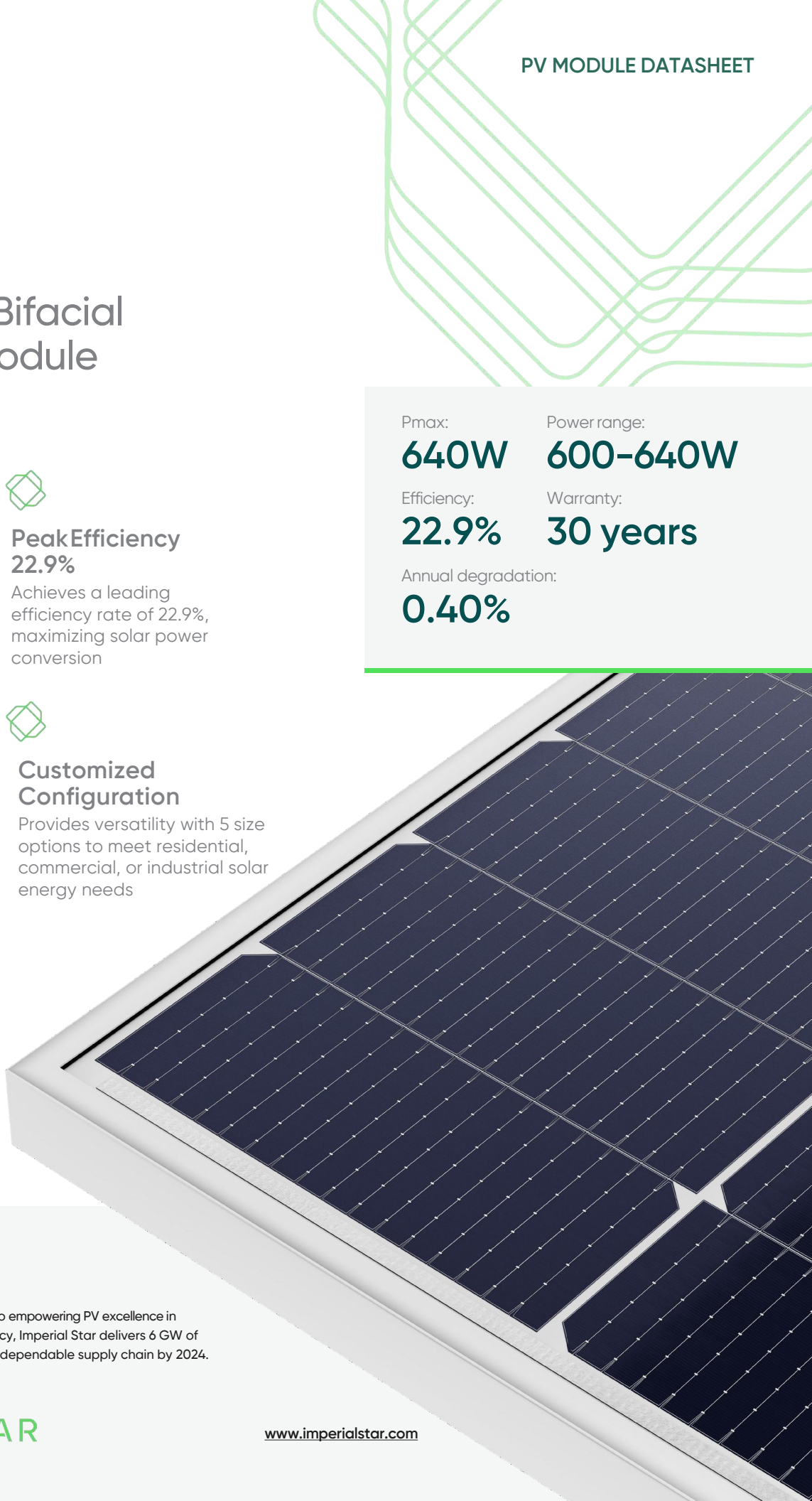
0.40%

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.





640W

Maximum Power Output

22.9%

Module Efficiency

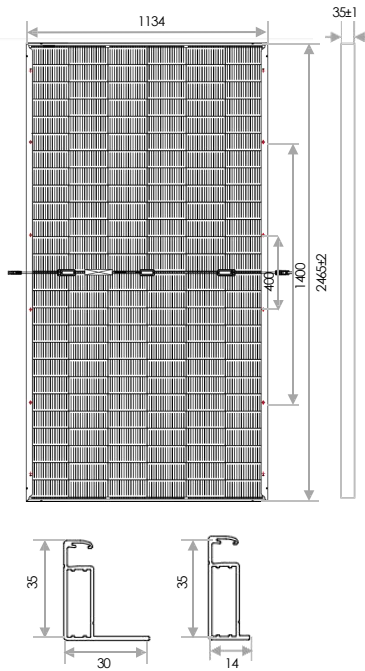
30Year






Power Output Warranty

12Year

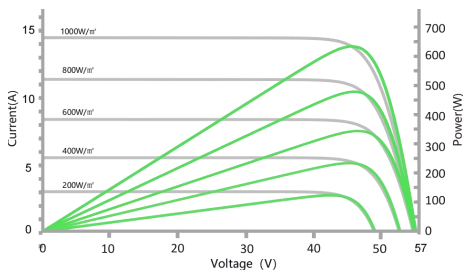
Product Warranty

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-UHSB156-640/M ISN7-UHSB156-605/M ISN7-UHSB156-610/M ISN7-UHSB156-615/M ISN7-UHSB156-620/M ISN7-UHSB156-625/M ISN7-UHSB156-630/M ISN7-UHSB156-635/M ISN7-UHSB156-640/M																	
		STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC		
Max. Power (Pmax)	W	600	453.2	605	457	610	460.8	615	464.5	620	468.3	625	472	630	475.8	635	479.6	640	483.4
Opt. Operating Current (Imp)	A	13.25	10.64	13.30	10.68	13.35	10.72	13.40	10.77	13.45	10.82	13.50	10.86	13.55	10.91	13.60	10.96	13.65	10.99
Opt. Operating Voltage (Vmp)	V	45.30	42.6	45.50	42.8	45.70	43.00	45.90	43.10	46.10	43.30	46.30	43.50	46.50	43.60	46.70	43.80	46.90	44.00
Short Circuit Current (Isc)	A	13.94	11.3	14.00	11.35	14.07	11.40	14.13	11.45	14.20	11.50	14.26	11.55	14.32	11.60	14.38	11.65	14.45	11.70
Open Circuit Voltage (Voc)	V	54.70	51.7	54.90	51.9	55.10	52.10	55.30	52.30	55.50	52.50	55.70	52.60	55.90	52.80	56.10	53.00	56.30	53.10
Module Efficiency		21.46%		21.64%		21.82%		22.00%		22.18%		22.36%		22.54%		22.72%		22.90%	
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)	-0.3%/°C
Temperature Coefficient (Voc)	-0.24%/°C
Temperature Coefficient (Isc)	+0.037%/°C

Mechanical Data

Dimensions	2465×1134×35 mm (With Frame)
Weight	35±1kg
Module composition	156(6*26)
Front glass thickness	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Frame material	Aluminum, silver anodized
J-Box	IP 68, 3 diodes
Cable	4 mm² ,350 mm (With Connectors)
Connector	QC4.10 PLUS

Packaging Specifications

Container	40HQ
Module quantity per pallet	31
Pallet quantity per container	16
Module quantity per container	496

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

