

# Atlas N

## TOPcon 182MM Bifacial Double Glass Module

555-590W



### 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 22.8%

Achieves a leading efficiency rate of 22.8%, 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 four size options to meet residential, commercial, or industrial solar energy needs.

Pmax:

**590W**

Power range:

**555-590W**

Efficiency:

**22.8%**

Warranty:

**30 years**

Annual degradation:

**0.40%**

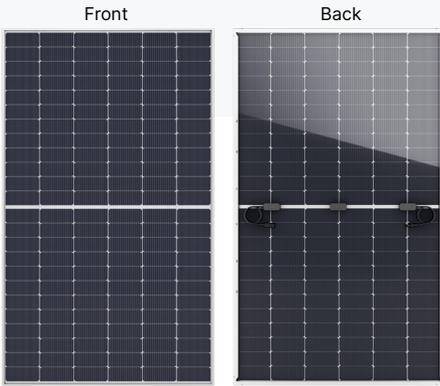
#### Product Certification



## 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 3 GW of PV Module capacity through its integrated and dependable supply chain.





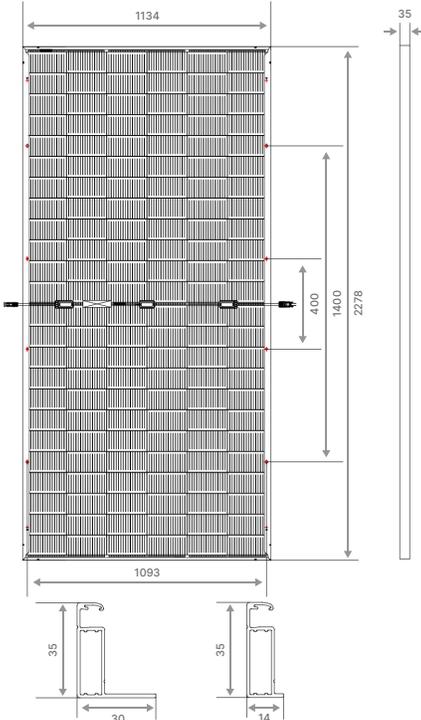
**590W**  
Maximum Power Output

**22.8%**  
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

Item	ISN7-UHSB144-550/M		ISN7-UHSB144-555/M		ISN7-UHSB144-560/M		ISN7-UHSB144-565/M		ISN7-UHSB144-570/M		ISN7-UHSB144-575/M		ISN7-UHSB144-580/M		ISN7-UHSB144-585/M	
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Max. Power (Pmax)	W															
Opt. Operating Current (Imp)	A															
Opt. Operating Voltage (Vmp)	V															
Short Circuit Current (Isc)	A															
Open Circuit Voltage (Voc)	V															
Module Efficiency	21.5%		21.7%		21.9%		22.1%		22.3%		22.5%		22.6%		22.8%	
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/m <sup>2</sup> , Module temperature 25°C, AM 1.5															
NOTC	Irradiance 800W/m <sup>2</sup> , Module temperature 20°C, AM 1.5, Wind speed 1m/s															

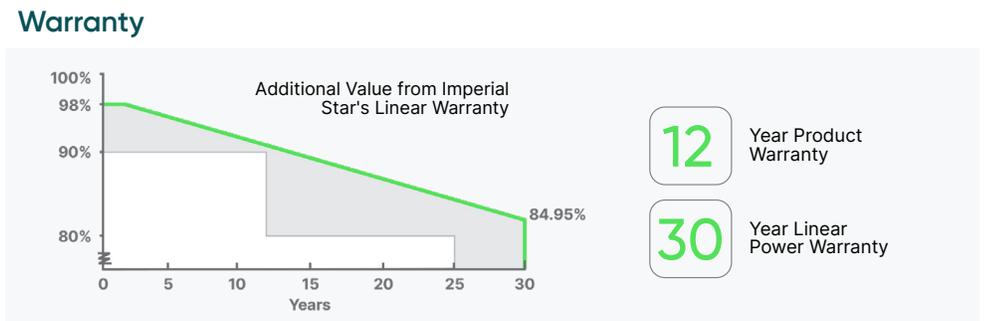
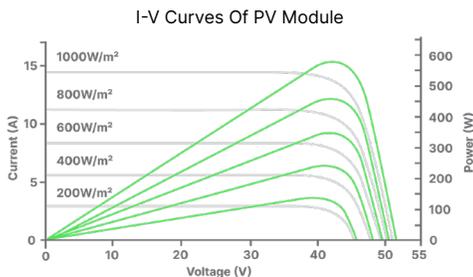
Temperature Characteristics	
Nominal Operating Cell Temperature	45±2°C
Temperature Coefficient (Pmax)	-0.3%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	+0.045%/°C

Mechanical Data	
Dimensions	2278 × 1134 × 35 mm
Weight	32.6±0.5kg
Module composition	144 (6*24)
Front glass thickness	2.0mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Frame material	Aluminum, silver anodized
J-Box	IP68, 3 diodes
Cable	Portrait: 300 mm; Landscape: 1400mm, 4mm <sup>2</sup> / 12 AWG
Connector	MC Compatible / MCA-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 200/m<sup>2</sup> is above 96.5% of the irradiance 1000W/m 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	



**12** Year Product Warranty

**30** Year Linear Power Warranty