Atlas

P-Type 182MM Bifacial Double Glass Module

580-610W

Pmax:
610W

Power range:
580-610W

Efficiency:
21.82%

Warranty:
30 years

Annual degradation:
0.45%

Maximized Power

Dual-sided solar absorption delivers up to 30% more power, with a bifacial rate of 70±5% for maximum efficiency

Extended Lifespan

Superior Aging Bi-Facial Glass for Extended Solar Lifespan

Exceptional Weather Resistance

Exceptional weather resistance against temperature variations, humidity, UV radiation, sand, dust, salt spray, and more

Advance Module Technology

Exceptional low light performance and low temperature coefficient

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.

IMPERIALSTAR

www.imperialstar.com

610W Maximum Power Output

21.82% Module Efficiency

30 Year Power Output Warranty

12 Year Product Warranty

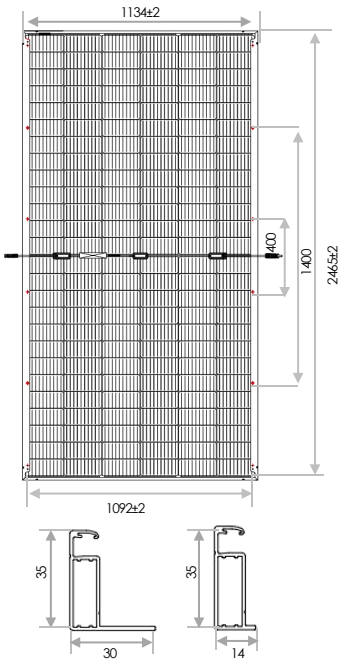
Item		ISM7-SHSB156-580M		ISM7-SHSB156-585M		ISM7- SHSB156-590M		ISM7-SHSB156-595M		ISM7-SHSB156-600M		ISM7-SHSB156-605M		ISM7-SHSB156-610M	
		STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Max. Power (Pmax)	W	580	432.6	585	436.1	590	439.9	595	443.4	600	447	605	450.6	610	454.3
Opt. Operating Current (Imp)	A	12.98	10.44	13.03	10.48	13.09	10.52	13.14	10.56	13.19	10.60	13.24	10.64	13.29	10.68
Opt. Operating Voltage (Vmp)	V	44.70	41.50	44.90	41.60	45.10	41.80	45.30	42.00	45.50	42.20	45.70	42.30	45.90	42.49
Short Circuit Current (Isc)	A	13.73	11.09	13.78	11.13	13.83	11.17	13.88	11.21	13.93	11.25	13.98	11.29	14.03	11.33
Open Circuit Voltage (Voc)	V	53.00	49.50	53.20	49.70	53.40	49.80	53.60	50.00	53.80	50.20	54.00	50.40	54.20	50.59
Module Efficiency		20.75%		20.93%		21.11%		21.29%		21.46%		21.64%		21.82%	
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)	-0.35%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	+0.045%/°C

Mechanical Data	
Dimensions	2465×1134×35 mm (With Frame)
Weight	35±1.0 kg
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	PV-XT101.2

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

Engineering Drawing



Anti-reflection coating and self-cleaning glass

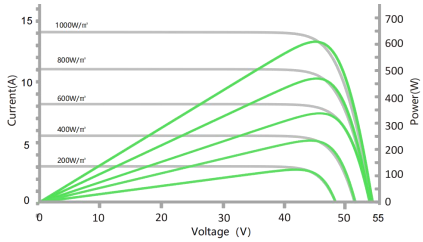
Special cutting and soldering technology leads to low hotspot risk

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

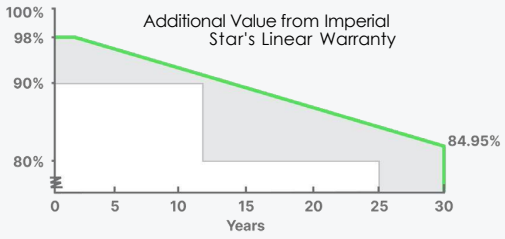


Performance under low irradiation

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	

Warranty



12 Year Product Warranty

30 Year Linear Power Warranty