Atlas

P-Type 182MM Bifacial Double Glass Module

520-555W

Pmax:
555W

Power range:
520-555W

Efficiency:
21.5%

Warranty:
30 years

Annual degradation:
0.45%

Maximize 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.

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PV MODULE DATASHEET
ISM7-SHSB144-555/M

Front

Back

555W
Maximum Power Output

21.5%
Module Efficiency

30 Year
Power Output Warranty

12 Year
Product Warranty

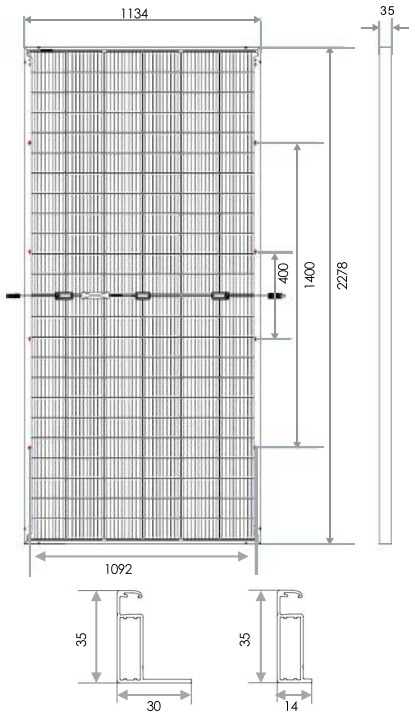
Item		ISM7-SHSB144-520/M		ISM7-SHSB144-525/M		ISM7-SHSB144-530/M		ISM7-SHSB144-535/M		ISM7-SHSB144-540/M		ISM7-SHSB144-545/M		ISM7-SHSB144-550/M		ISM7-SHSB144-555/M	
		STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Max. Power (Pmax)	W	520	389	525	392.4	530	396.2	535	399.9	540	403.6	545	407.4	550	411.1	555	414.8
Opt. Operating Current (Imp)	A	12.66	10.14	12.74	10.21	12.81	10.26	12.88	10.32	12.96	10.38	13.03	10.44	13.10	10.49	13.18	10.56
Opt. Operating Voltage (Vmp)	V	41.09	38.30	41.24	38.48	41.39	38.62	41.54	38.76	41.69	38.90	41.84	39.04	41.99	39.18	42.14	39.32
Short Circuit Current (Isc)	A	13.63	10.99	13.69	11.04	13.75	11.09	13.81	11.14	13.87	11.19	13.93	11.23	13.99	11.28	14.05	11.33
Open Circuit Voltage (Voc)	V	48.88	46.0	49.03	46.10	49.18	46.24	49.33	46.38	49.48	46.52	49.63	46.66	49.78	46.80	49.93	46.94
Module Efficiency		20.1%		20.3%		20.5%		20.7%		20.9%		21.1%		21.3%		21.5%	
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	2278 x 1134 x 35 mm
Weight	32.6±0.5 kg
Module composition	144 (6*24)
Front glass thickness	2.0 mm+2.0 mm high transparency, AR coating, thermal reinforced glass
Frame material	Aluminum, silver anodized
J-Box	IP68, 3 diodes
Cable	Portrait: 300 mm; Landscape: 1400mm, 4mm² / 12 AWG
Connector	MC Compatible / MC4-EV02 (optional)

Packaging Specifications	
Container	40HQ
Module quantity per pallet	31
Pallet quantity per container	20
Module quantity per container	620

Engineering Drawing



Anti-reflection coating and self-cleaning glass

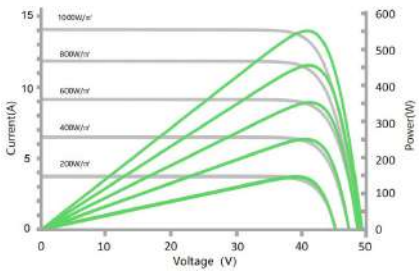
Special cutting and soldering technology leads to low hotspot risk

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

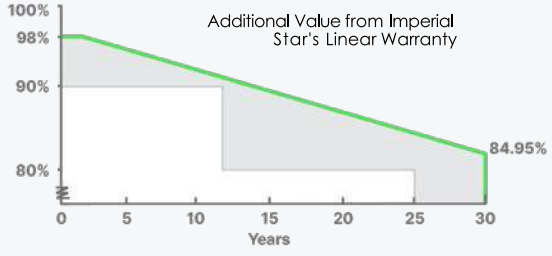


Performance under low irradiation

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