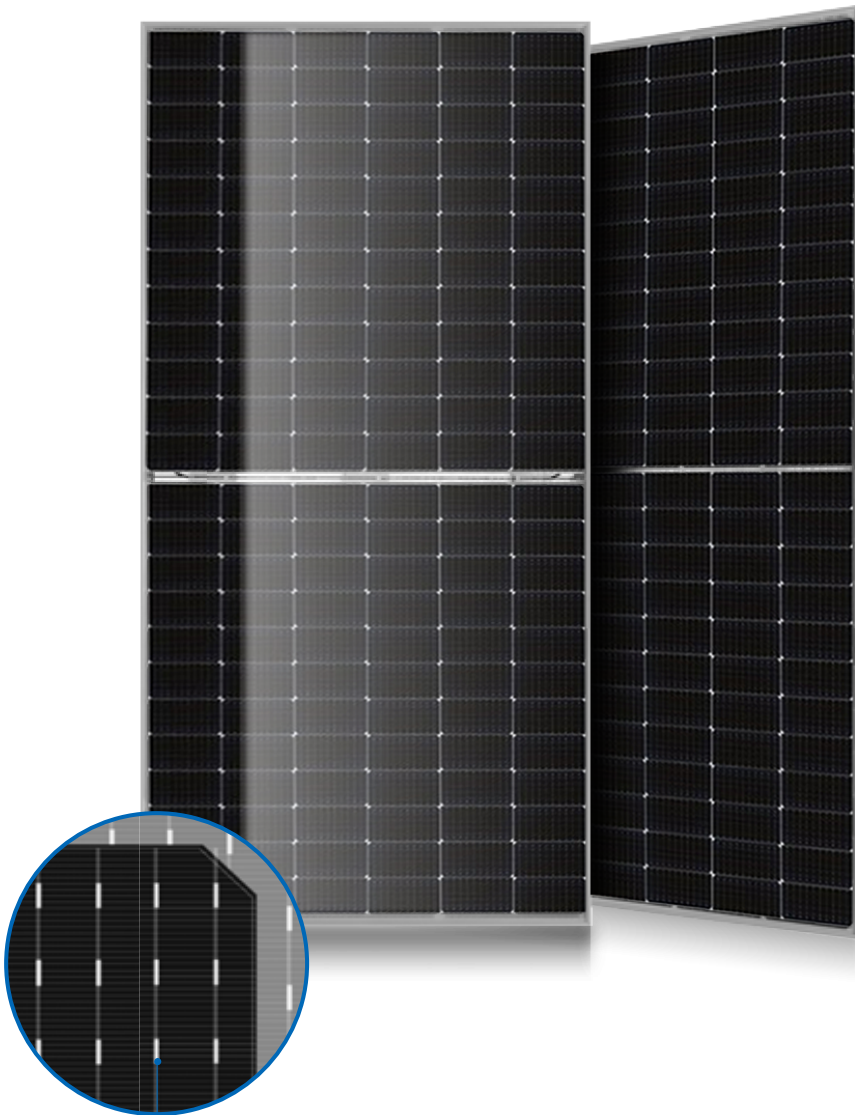


525~545M

STM-525-545/144-S3S BIFACIAL MONO PERC



• Double-sided cell technology

High Efficiency

Higher module conversion efficiency(up to 21.03%) benefit from half cell structure(low resistance characteristic).



Multi busbar technology

Better light utilization and current collection capabilities, effectively improving product power output and reliability.



Longer service life

Excellent double-sided warranty promises a 30-year power warranty of 0.45% linear power attenuation.



Severe Weather Resilience

Certified to withstand: Wind load(2400 pascal) and snow load(5400 pascal).



Double-sided power generation

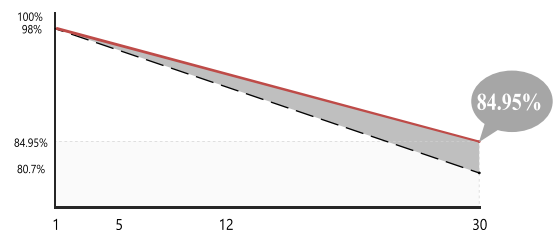
The double-sided power generation gain increases with the light received on the back side, up to 25%, which significantly reduces the LCOE.



12-year Warranty for
Materials and Processing



30-year Warranty for
Extra Linear Power Output



IEC61215, IEC61730, IEC61701, IEC62716, IEC62804

ISO 9001:2015: ISO Quality Management System

ISO 14001: 2015: ISO Environment Management System



STM-525-545/144-S3S

525-545W

Half-Cell High Efficiency PV Module

Weight

28.0kgs±3%

Cells Type

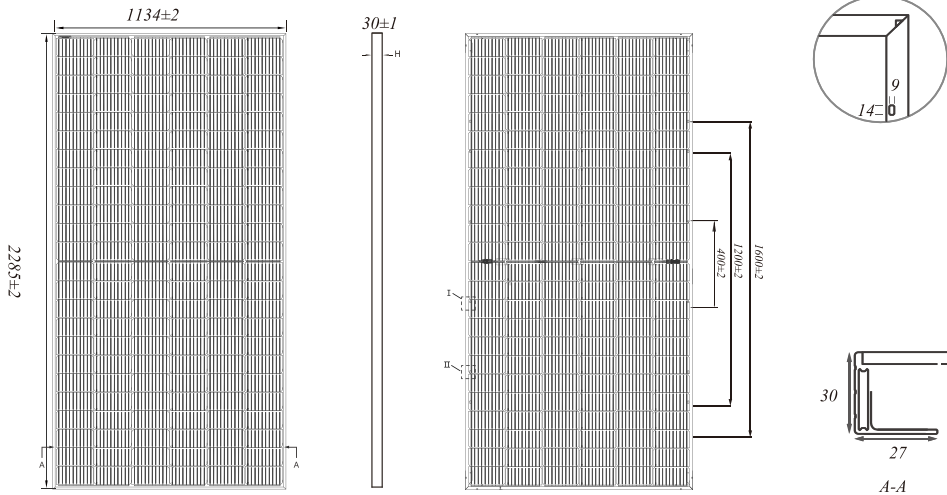
Mono 182x91mm

Dimension(LxWxT)

2285±2mmx1134±2mmx30±1mm

Packaging

35pcs/pallet, 700pcs/40HQ container



Front

Side

Back

Remark: customized frame color and cable length available upon request

MECHANICAL SPECIFICATION

Cell	Mono
No.of cells	144(6x24)
Cable Length	300mm(+)/300mm(-)
Cable Cross Section Size	4mm ² (IEC)
Junction Box	IP68,3 diodes
Connector	MC4 Compatible

OPERATING PARAMETERS

Maximum System Voltage	1500VDC
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	30A
Maximum StaticLoad,Front	5400Pa(112lb/ft ²)
Maximum StaticLoad,Back	2400Pa(50lb/ft ²)
Safety Class	ClassII

ELECTRICAL CHARACTERISTICS

STC:AM1.5 1000W/m² 25 C NOCT:AM1.5 800W/m² 20 C 1m/s Test uncertainty for Pmax ±3%

Module Type	STM-525/144-S3S		STM-530/144-S3S		STM-535/144-S3S		STM-540/144-S3S		STM-545/144-S3S	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	525	390.6	530	394.3	535	398.0	540	401.8	545	405.5
Open Circuit Voltage(Voc/V)	13.64	11.02	13.71	11.07	13.79	11.14	13.87	11.20	13.94	11.26
Short Circuit Current(Isc/A)	49.27	46.51	49.35	46.59	49.42	46.65	49.49	46.72	49.65	46.87
Voltage at Maximum Power(Vmp/V)	40.61	37.58	40.71	37.75	40.81	37.88	40.91	38.02	41.07	38.17
Current at Maximum Power(Imp/A)	12.93	10.39	13.02	10.45	13.11	10.51	13.20	10.57	13.27	10.62
Module Efficiency(%)	20.26		20.45		20.65		20.84		21.03	

ELECTRICAL CHARACTERISTICS WITHDIFFERENT REAR SIDE POWER GAINS

(REFERENCEDSPECIFICALLY TO 540WP FRONT)

	5%	10%	15%	20%	25%
Maximum Power(Pmax/W)	572	600	627	654	681
Pmax Gain(%)	22.07%	23.16%	24.20%	25.24%	25.28%

TEMPERATURE RATINGS

Norminal Operating Cell Temperature(NOCT)	45±2 C
Temperature Coefficiency of Isc	+0.048%/ C
Temperature Coefficiency of Voc	-0.280%/ C
Temperature Coefficiency of Pmax	-0.350%/ C

I-V CURVE(STM-525-545/144-S3S)

