

# JST-ECMH-(520-540)W-TD

MBB HALF-CELL N-Type Bifacial Double Glass  
FULL BLACK Monocrystalline PV Module TOPCON

**520-540W**      **24.28%**      **0.40%**  
**POWER RANGE**    **MAXIMUM EFFICIENCY**    **YEARLY DEGRADATION**

**12** 12 YEARS PRODUCT WARRANTY

**30** 30 YEARS OUTPUT GUARANTEE



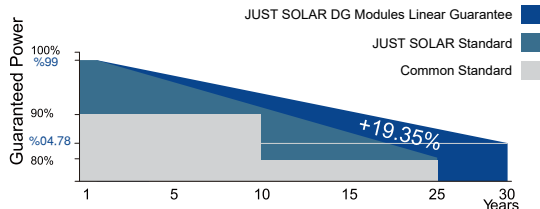
IEC 61215/IEC 61730

ISO 14001: Environmental Management System

ISO 9001: Quality Management System

ISO45001: Occupational Health and Safety Management System

\*As there are different certification requirements in different markets, please contact your local sales representative for the specific certificates applicable to the products in the region in which the products are to be used.



\*Please check the valid version of Limited Product Warranty which is officially released by JUST SOLAR GROUP LIMITED.

## Key Features



### Excellent Cells Efficiency

SMBB technology reduce the distance between busbars and finger grid line which is benefit to power increase.



### Better Weak Illumination Response

More power output in weak light condition, such as haze, cloudy, and early morning.



### Anti PID

Ensured PID resistance through the quality control of cell manufacturing process and raw materials.



### Adapt To Harsh Outdoor Environment

Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity environment.



### Reaction to Fire Class 1

In conformity with standard UNI 9177:1987, reaction to fire class 1.



### Excellent Quality Management System

Warranted reliability and stringent quality assurances well beyond certified requirements.

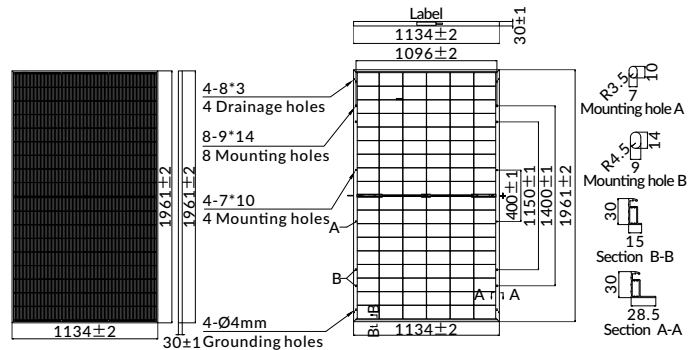


### Bifacial Technology

Up to 25% additional power gain from back side depending on albedo.

**MECHANICAL CHARACTERISTICS**

Solar Cells	N-type Mono
No. of Cells	108 (6x18)
Dimensions	1961 x 1134 x 30mm
Weight	27.5kg
Front / Back Glass	2.0mm coated semi-tempered glass
Frame	Anodized aluminium alloy (reinforced high-load optional)
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4.0mm <sup>2</sup>
	250mm (+) / 350mm (-) Length can be customized
Connectors	Mc4 compatible
Mechanical load test	Front 5400Pa / Rear 2400Pa



**ELECTRICAL PARAMETERS**

POWER CLASS	520		525		530		535		540	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	520W	391W	525W	395W	530W	399W	535W	403W	540W	407W
Open Circuit Voltage (Voc)	41.60V	39.09V	41.81V	39.33V	42.03V	39.55V	42.25V	39.78V	42.47V	40.01V
Short Circuit Current (Isc)	15.84A	12.67A	15.90A	12.72A	15.96A	12.77A	16.02A	12.82A	16.08A	12.87A
Voltage at Maximum power (Vmpp)	34.85V	32.75V	35.05V	32.98V	35.24V	33.17V	35.44V	33.37V	35.63V	33.57V
Current Maximum Power (Impp)	14.92A	11.94A	14.98A	11.98A	15.04A	12.03A	15.10A	12.08A	15.16A	12.12A
MODULE EFFICIENCY (%)	23.38%		23.61%		23.83%		24.06%		24.28%	

STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM1.5G    NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s, AM1.5G

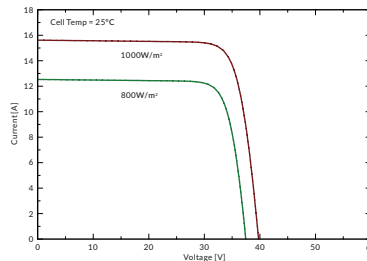
**BIFACIAL OUTPUT-REAR SIDE POWER GAIN**

Gain	Parameter	520	525	530	535	540
5%	Maximum power (Pmax)	546W	551W	557W	562W	567W
	Module Efficiency STC (%)	24.55%	24.79%	25.03%	25.26%	25.50%
15%	Maximum power (Pmax)	598W	604W	610W	615W	621W
	Module Efficiency STC (%)	26.89%	27.15%	27.41%	27.67%	27.93%
25%	Maximum Power (Pmax)	650W	656W	663W	669W	675W
	Module Efficiency STC (%)	29.23%	29.51%	29.79%	30.07%	30.35%

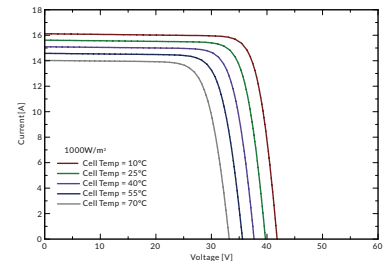
**PACKING CONFIGURATION**

Container	40'HQ
Pieces per pallet	36
Pallets per container	26
Pieces per container	864

**I-V CURVE**



**520W**



**OPERATING CHARACTERISTICS**

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	30A
Power Tolerance	0/+5W

**TEMPERATURE CHARACTERISTICS**

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C