TOPSUN

TOP- 580 | 600M-144BI

MONOCRISTALLYNE
BIFACIAL PV MODULES

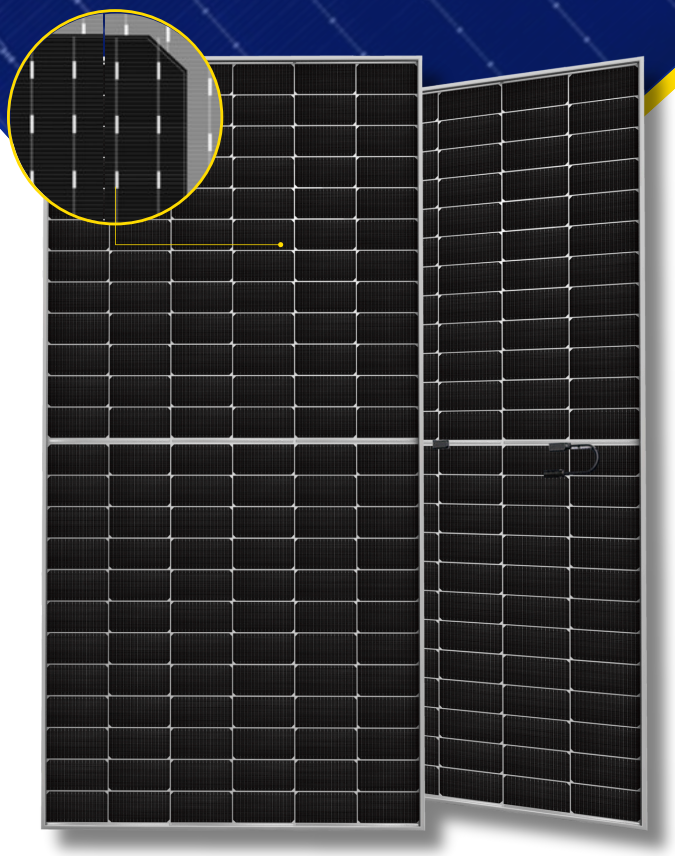
N-TYPE TECHNOLOGY

580 - 600 WP

144 CELLS * 182MM

MAX. EFFIENCY 23,2%

DOUBLE GLASS



61215 61730 OHSAS18001 CE ISO14001 ISO 9001 RECYCLE

KEY FEATURES

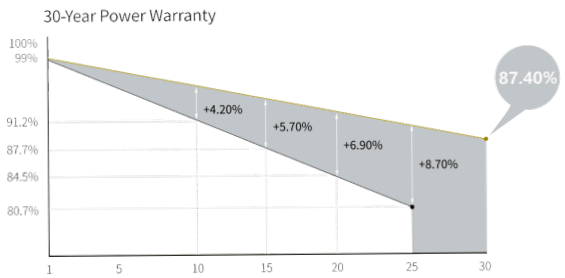
- Industry lower thermal coefficient pwr
- 15+10 Years Product EU Warranty
- Excellent irradiance performance
- Excellent PID resistance
- Positive tolerance from 0 to +3%
- Fully automated production all stages
- Reduced power losses **16 BUSBAR**
- **European Quality Standards, warranty and after sales service**

TAMESOL building a green future SL, is a European manufacturer of high-efficiency PV panels with a 10GW annual production capacity and 100% automated production line located in China, **innovating state-of-the-art products for over 18 years.**

Our panels have been installed in more than 50 countries, with over 20 million panels already connected to the grid.

PERFORMANCE WARRANTY

1% first year - 0,40% year 2 to 30



*15 (+10)-year Product & 30-year Linear Power

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TAMESOL

23,20%	+3%	1%	0,40%	N-TYPE CELL
MAX. MODULE EFFICIENCY	POWER TOLERANCE	1ST YEAR POWER DEGRADATION	YEAR 2 TO YEAR 30	LOWER OPERATING TEMPERATURE

PACKING MANNER

Packaging(pcs/40HQ container)		17.5 meter semi hanging		Dimensions	Weight
31/620pcs	37/740pcs	31/930pcs	37/1036pcs	2278x1134x35(30)mm	32.6kg±3%

MECHANICAL SPECIFICATION

Cell	N-type mono-crystalline
No.of cells	144(6x24)
Cable Length	300mm(+)/300mm(-)
Cable Cross Section Size	4mm²(IEC)
Junction Box	IP68,3 diodes
Connector	MC4 Compatible
STC:AM1.5 1000W/m² 25°C	NOCT:AM1.5 800W/m² 20°C 1m/s

OPERATING PARÁMETERS

Maximum System Voltage	1500VDC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	25A
Maximum StaticLoad,Front	5400Pa(112lb/ft²)
Maximum StaticLoad,Back	2400Pa(50lb/ft²)
Safety Class	Class II
Test Uncertainty for Pmax	±3%

ELECTRICAL CHARACTERISTICS

NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax 0 - +3%

Module Type	TOP-580M-144BI		TOP-585M-144BI		TOP-590M-144BI		TOP-595M-144BI		TOP-600M-144BI	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	580	436	585	440	590	444	595	448	600	451
Open Circuit Voltage(Voc/V)	51.02	48.42	51.16	48.55	51.30	48.69	51.44	48.82	51.58	48.95
Short Circuit Current(Isc/A)	14.47	11.68	14.55	11.74	14.63	11.81	14.71	11.87	14.79	11.94
Voltage at Maximum Power(Vmp/V)	42.37	39.75	42.52	39.87	42.67	39.99	42.82	40.11	42.97	40.23
Current at Maximum Power(Imp/A)	13.69	10.98	13.76	11.04	13.83	11.10	13.90	11.16	13.97	11.22
Module Efficiency(%)	22.50		22.60		22.80		23.00		23.20	

TEMPERATURE RATINGS (STC)

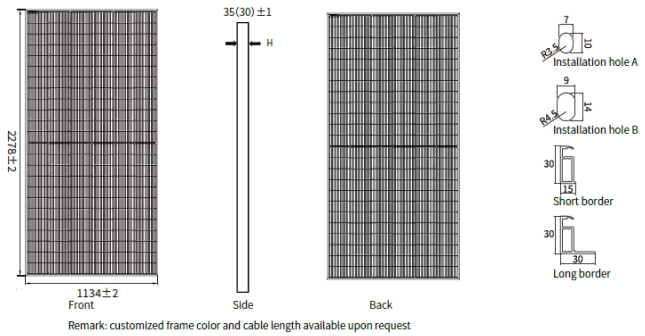
Norminal Operating Cell Temperature(NOCT)	45±2°C
Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.275%/°C
Temperature Coefficient of Pmax	-0.300%/°C

POWER OUTPUT FONT & REAR SIDE

(REFERENCEDSPECIFICALLY TO 580WP FRONT)

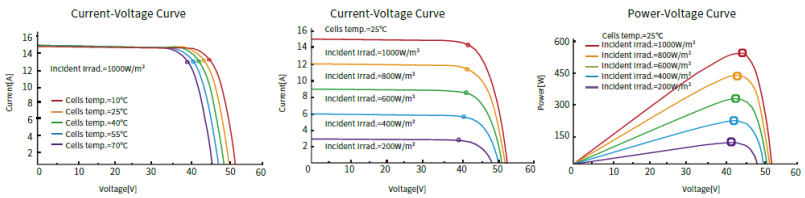
Power Gain (%)	5%	10%	15%	20%	25%
Maximum Power(Pmax/W)	609	638	667	696	725
Pmax Gain(%)	23.60%	24.70%	25.80%	26.90%	28.10%

SIZES OF MODULE



Remark: customized frame color and cable length available upon request

I-V CURVE (TOP-580 | 600M-144BI)



OFFICIAL SOLAR DEALER

Note: The specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m2 solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m2, 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum. Please contact info@tamesol.com for technical support. The actual transactions will be subject to the contracts. This parameter is for reference only and it is not a part of the contracts. The specifications are subject to change without prior notice.