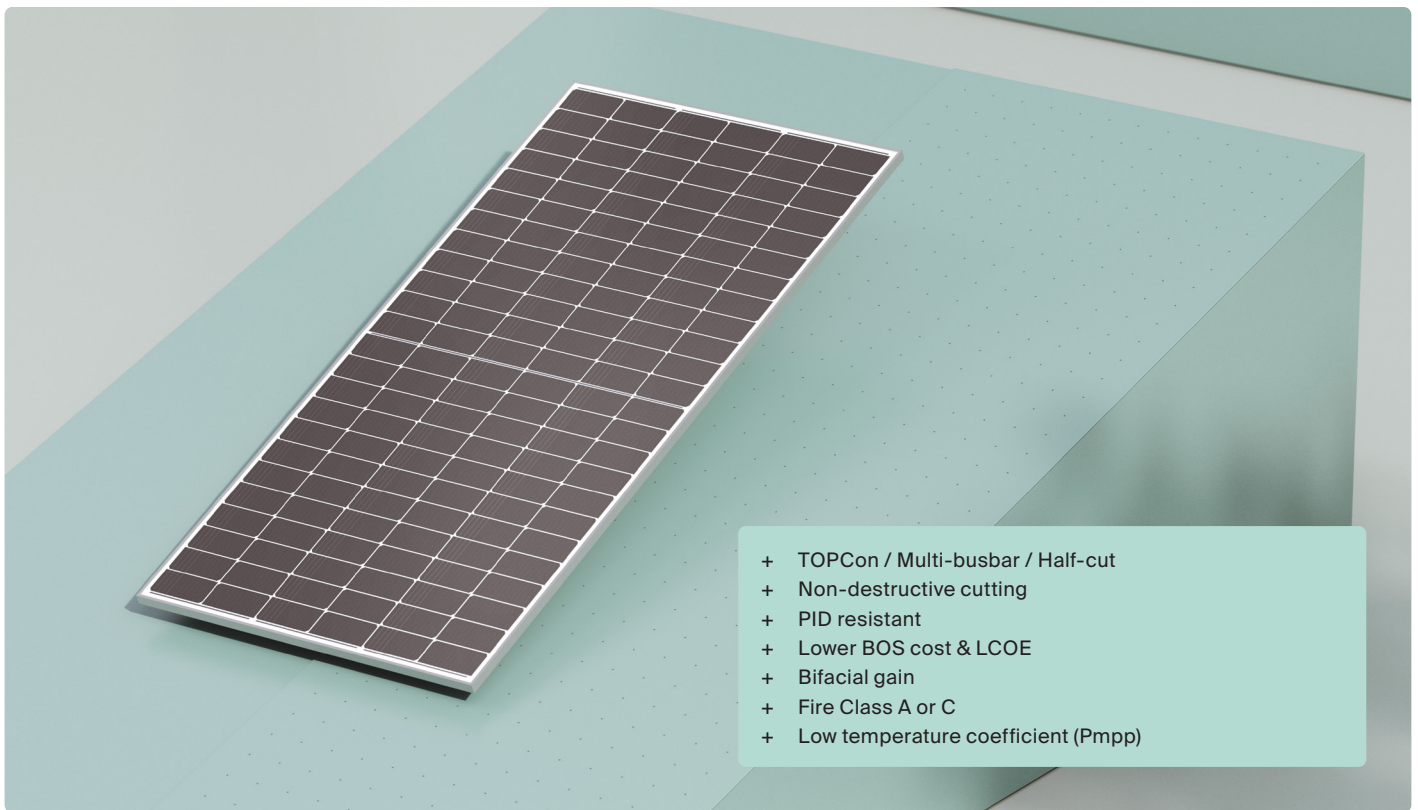


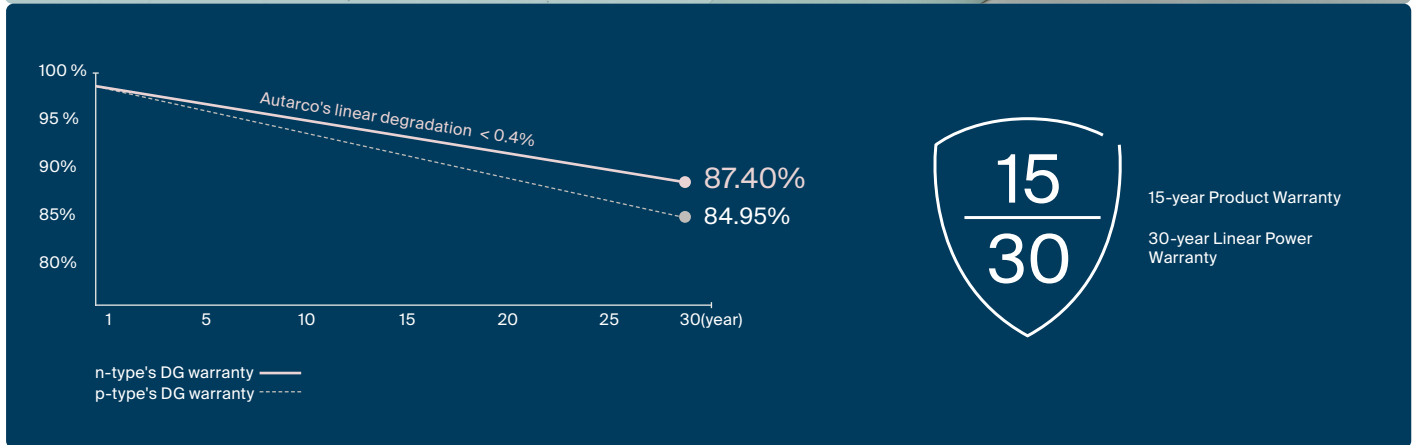
# TBN

## Series solar panels

Reach full potential



- + TOPCon / Multi-busbar / Half-cut
- + Non-destructive cutting
- + PID resistant
- + Lower BOS cost & LCOE
- + Bifacial gain
- + Fire Class A or C
- + Low temperature coefficient (Pmpp)



# 565~585W

Power Range

# 0~+3W

Power Sorting

# 22.6%

Max Module Efficiency

# ≤ 1.0%

First Year Power Degradation

# ≤ 0.4%

Year 2-30 Power Degradation

## Electrical specification

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C, AM=1.5

Rated output (Pmpp/Wp)	565	570	575	580	585
Open circuit voltage (Voc/V)	51.49	51.73	52.20	52.44	51.50
Short circuit current (Isc/A)	13.89	13.95	14.04	14.11	14.36
Rated voltage (Vmpp/V)	42.68	42.86	43.04	43.22	43.27
Rated current (Impp/A)	13.24	13.30	13.36	13.42	13.52
Module efficiency	21.87%	22.07%	22.26%	22.45%	22.60%

NMOT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20 °C, AM=1.5, Wind Speed 1m/s

Rated output (Pmpp/Wp)	433	436	440	444	440
Open circuit voltage (Voc/V)	49.30	49.53	49.98	50.21	48.92
Short circuit current (Isc/A)	11.19	11.24	11.31	11.36	11.59
Rated voltage (Vmpp/V)	40.57	40.74	40.92	41.09	40.73
Rated current (Impp/A)	10.66	10.71	10.76	10.81	10.80

## Temperature ratings (STC)

Temp. coefficient (Pmpp)	-0.29%/°C
Temp. coefficient (Isc)	+0.043%/°C
Temp. coefficient (Voc)	-0.25%/°C
Nominal module operating temperature (NMOT)	42 °C (+/- 2 °C)

## Operating parameters

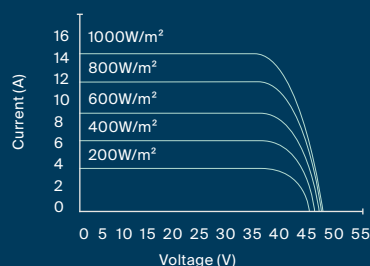
No. of diodes	3
Junction Box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V <sub>DC</sub>

## Mechanical specifications

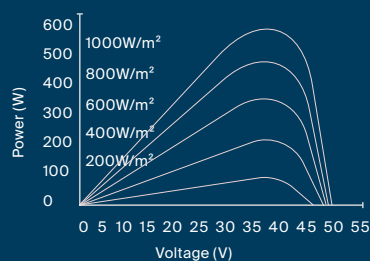
Outer dimensions (L x W x H)	2278 x 1134 x 30 mm
Cell type	144 (182 x 91 mm), n type mono-crystalline, in a 2 x 6 x 12 matrix connected in series
No. of cells	144 (6*24)
Frame technology	Aluminum, silver anodized
Front / Back glass	Front / Back: 2.0 + 2.0 mm glass
Cable length (IEC/UL)	TBN580: 1200 mm TBN585: 1400 mm
Cable diameter (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
① Max. mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	MC4-EVO2A
Operating temperature	-40°C to 85°C
Fire performance	Class A or C (UL 790)
Module weight	32.0 kg
Packing unit	36 pcs / box (Subject to sales contract)
Weight of packing unit	1207 kg
Modules per 40' HQ container	720 pcs

## Curve

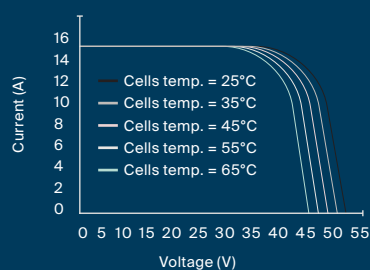
### Current-Voltage (580W)



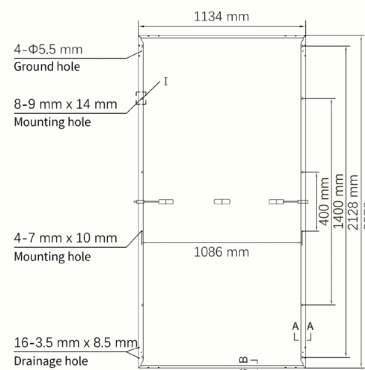
### Power-Voltage (580W)



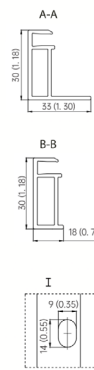
### Current-Voltage (580W)



### Solar panel



### Frame cross section



① Refer to Autarco installation manual or contact technical department. Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

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