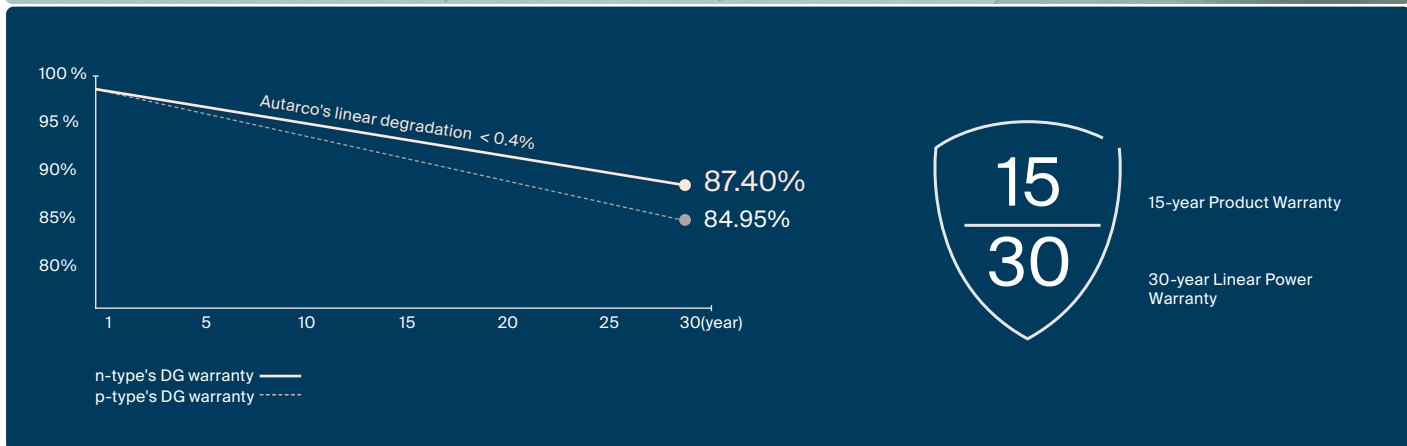
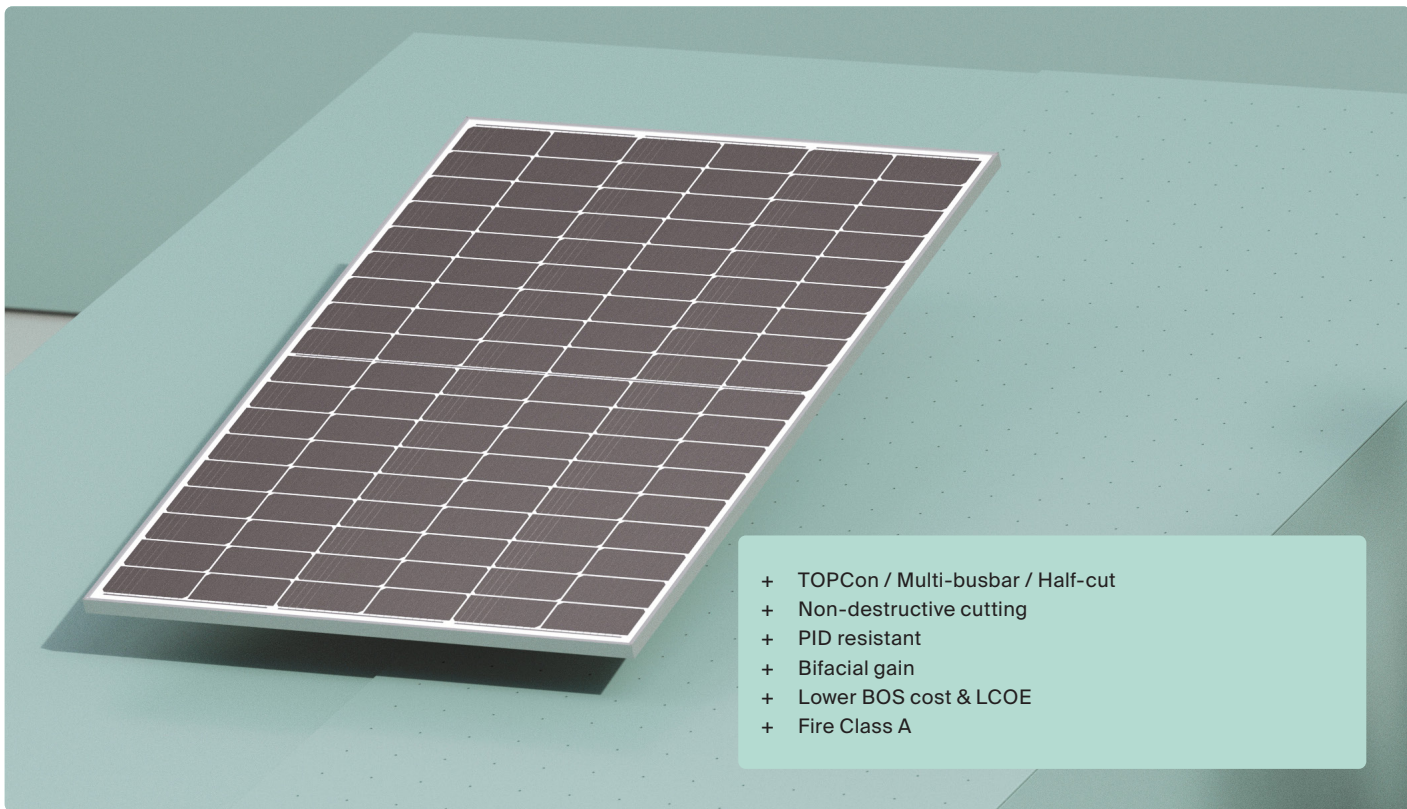


TBJ

Series solar panels

Reach full potential



410~425W

Power Range

0~+5W

Power Tolerance

21.8%

Max Module Efficiency

≤ 1.0%

First Year Power Degradation

≤ 0.4%

Year 2-30 Power Degradation

Electrical specification

STC: Irradiance 1000W/m², Cell Temperature 25 °C, AM=1.5

Rated output (P _{mpp} / W _p)	410	415	420	425
Open circuit voltage (V _{oc} / V)	37.90	38.10	38.30	38.50
Short circuit current (I _{sc} / A)	13.59	13.70	13.81	13.92
Rated voltage (V _{mpp} / V)	31.85	32.02	32.18	32.35
Rated current (I _{mpp} / A)	12.87	12.96	13.05	13.14
Module efficiency	21.0%	21.3%	21.5%	21.8%

NMOT: Irradiance 800W/m², Ambient Temperature 20 °C, AM=1.5, Wind Speed 1m/s

Rated output (P _{mpp} / W _p)	308.3	312.1	315.8	319.6
Open circuit voltage (V _{oc} / V)	36.00	36.19	36.38	36.57
Short circuit current (I _{sc} / A)	10.97	11.06	11.15	11.24
Rated voltage (V _{mpp} / V)	29.98	30.14	30.29	30.45
Rated current (I _{mpp} / A)	10.29	10.36	10.43	10.50

Temperature ratings

Temp. coefficient (P _{mpp})	-0.29% / °C
Temp. coefficient (I _{sc})	+0.043% / °C
Tempe. coefficient (V _{oc})	-0.25% / °C
Nominal module operating temperature (NMOT)	41°C (+/- 2°C)

Operating parameters

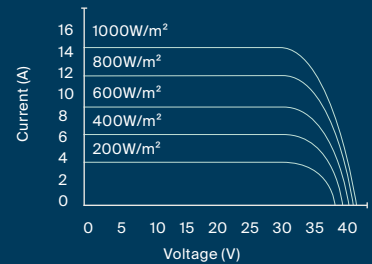
No. of diodes	3
Junction Box IP rating	IP 68
Max. series fuse rating	30 A
Max. system voltage (IEC/UL)	1500V _{DC}

Mechanical specifications

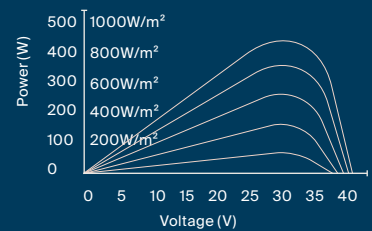
Dimensions (W x H x D)	1722 x 1134 x 30mm
Cells	108 (182 x 91 mm), N type mono-crystalline, in a 6 x 18 matrix connected in series
Frame technology	Aluminum, silver anodized
Construction	Front+Back: 1.6mm Encapsulant: EVA
Cable length (IEC/UL)	1200mm
Cable diameter (IED/UL)	4 mm ² / 12 AWG
① Max. mechanical test load	5400 (front) / 2400 Pa (back)
Connector type (IEC/UL)	MC4-EVO2A
Operating temperature	-40°C to 85°C
Passed hail test	45mm hail @ 30.7m/s
Fire performance	Class A (IEC) or Type 2 (UL)
Module weight	20.8 kg
Packing unit	36 pcs / pallet
Weight of packing unit	793 kg
Quantity per 40'HQ container	936 pcs

Curve

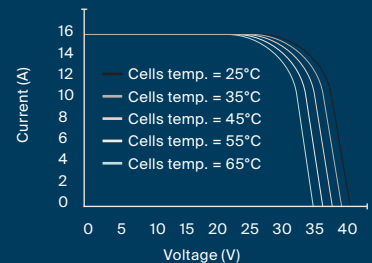
Current-Voltage (420W)



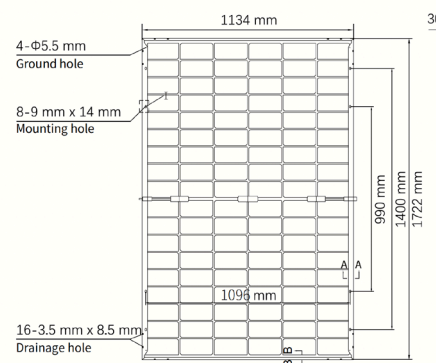
Power-Voltage (420W)



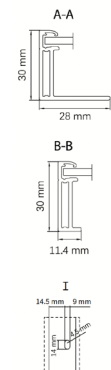
Current-Voltage (210W)



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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