



POWER RANGE
 from 460 Wp





CELL TECHNOLOGY
 10BB Half Cut Monocrystalline




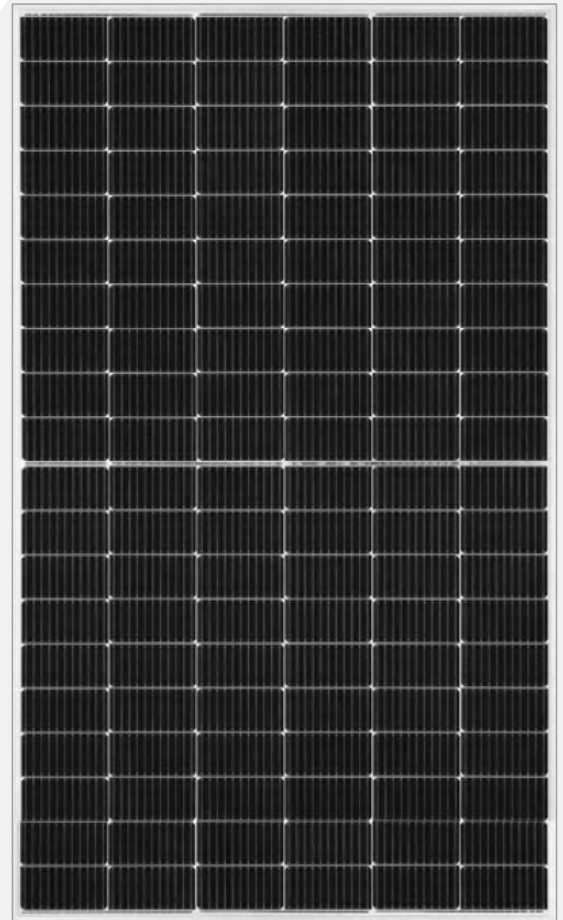
GUARANTEES
 20 year warranty against manufacturing defects;
 30 year linear warranty to 85% of the maximum declared power*

OUR COMPANY VISION

 High quality, certified and controlled raw materials are the distinctive features of our products.

 Constant company research and development have always increased our standards both in terms of performance and in terms of architectural integration.

 The combination of aesthetics and functionality is a fundamental point in a society that is increasingly attentive to the approach of the product with the context.



Product certifications:

- CEI EN / IEC 61215 (2016)
- CEI EN / IEC 61730-1/2 (2016)
- Factory Inspection
- Class of reaction to fire I (UNI 9177)
- Production "Made extra EU"
- EC Directives: EMC 2004/108/EC; 2006/95/EC low Voltage

Company certifications :

- Corporate Quality Management EN ISO 9001:2015
- Environmental Management EN ISO 14001:2015
- Management of Health and Safety at the Workplace EN ISO 45001:2018
- Certificates issued by ASACERT Assessment & Certification

*If used and installed according to technical and operational instructions. The Company reserves the right to make changes to product specifications.

AVAILABLE POWERS ^{[1][2]}

Maximum power ^[3]	P_{max} [W]	460
Maximum power voltage	V_{mp} [V]	35,11
Current at maximum power	I_{mp} [A]	13,11
Open-circuit voltage	V_{oc} [V]	41,80
Short-circuit current	I_{sc} [A]	13,93
Efficiency	Eff. [%]	21,32

[1] Electrical values measured under STC conditions: Irradiation 1000 W / m² - Module temperature = 25 °C - Air mass AM 1.5 - Wind speed 1 m / s.

[2] Measurement tolerance of Pmp, Vmp, Imp, Voc, Isc values equal to (- / + 3%) with A class solar simulator in accordance with IEC 60904-9.

[3] Sorting tolerance Pmax : 0/+3 W



CONSTRUCTION PROPERTIES

Module size [mm]	1903 x 1134 x 30
Cell technology	Half cut PERC monocrystalline silicon
Cell size [mm]	182 mm x 91 mm
Cell number	120
Front side	Anti-glare tempered solar glass (EN 12150)
Back side	White PET
Frame type	Aluminum
Frame finish	Silver anodized
Cables type	Solar cables with a section of 4.0 mm ²
Cable length [mm]	350
Connector type	MC4
Number of bypass diodes	3
Module weight [kg]	23,8



PARAMETERS FOR INTEGRATION INTO THE SYSTEM

Maximum system voltage [V]	1500
Class of protection against electrical leakage	Class II
Load capacity of reverse current [A]	20
Maximum permissible load in pressure/traction [Pa]	5400 / 2400
Nominal operating temperature range [°C]	-40/+85
Maximum allowable relative humidity [%]	85
Hail impact resistance [Km/h] ^[4]	84,6

[4] Test carried out with a sphere with a diameter of 25 mm according to IEC 61730.

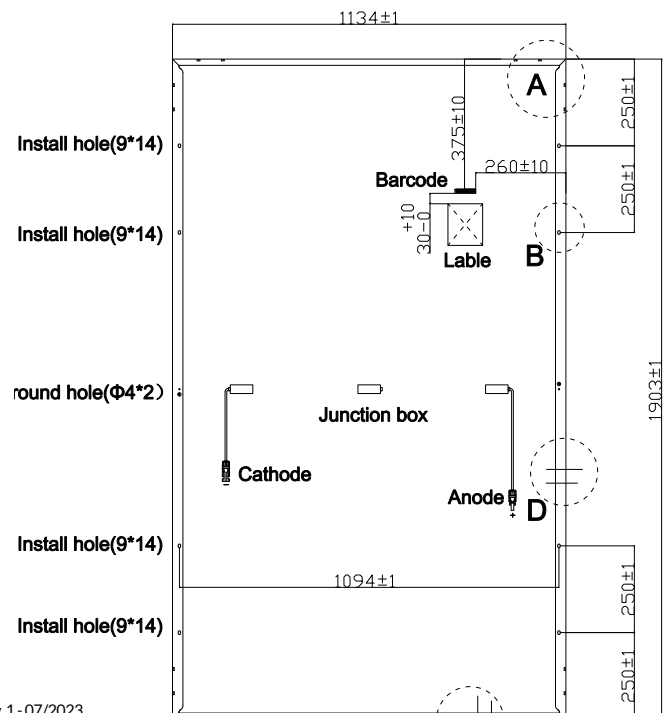
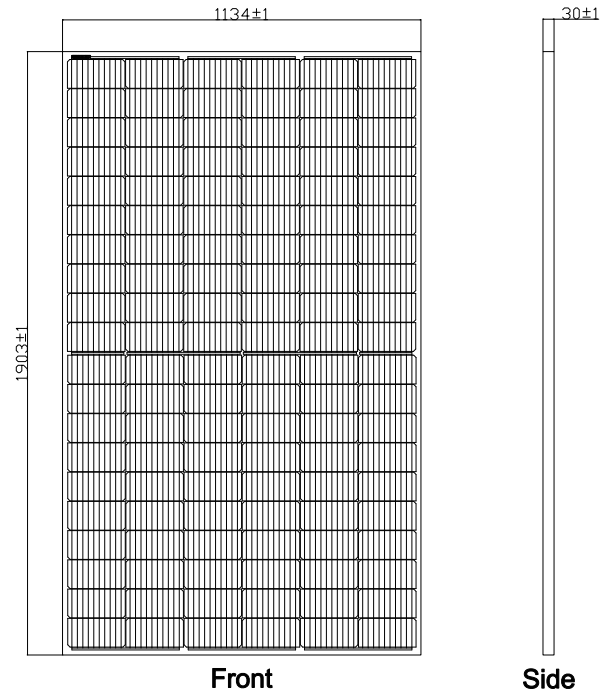


THERMAL CHARACTERISTICS ^[5]

NMOT [°C]	45 +/-2°C
Temperature coefficient of electric current Alfa [%/°C]	0,045
Temperature coefficient of electrical voltage Beta [%/°C]	-0,285
power temperature coefficient Gamma [%/°C]	-0,35

[5] NMOT value tested under the following conditions:

- Air temperature Te, NOCT = 20 °C;
- GNOCT irradiance = 800 W/m²; Wind speed 1 m/s;
- Module placed on 37° inclined surface, therefore no thermal convection on the underside.



Rev. 1 - 07/2023

The Company reserves the right to make changes to product specifications. This data sheet corresponds to the requirements of Standard EN50380.