



Beam 2 Plus

Silver / Black Frame (182mm)

530-550W

Mono PERC Half Cell Module
ENSP72M2 Series



Key Features



Lower operating temperatures

Low operating temperatures and coefficients increases performance.



Non-destructive cutting

Higher bending strength of cells and mechanical properties of modules.



High customer value

Lower BOS cost and LCOE.



Half Cell technology

Excellent performance under real conditions.



Higher efficiency

Higher module power efficiency up to 20.6%.



Keeps going and going

Engineered and designed to withstand harsh environments.

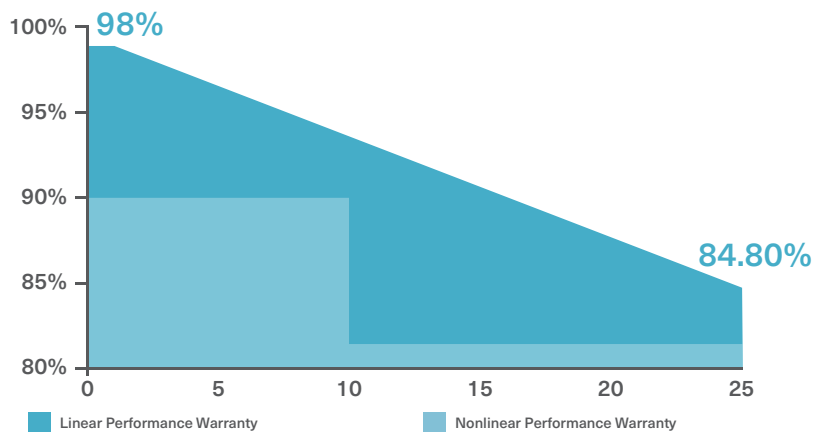
Warranty



Product warranty



Linear power output warranty
(1st year ≤ 2.0%, 2nd~25th years ≤ 0.55% / year)

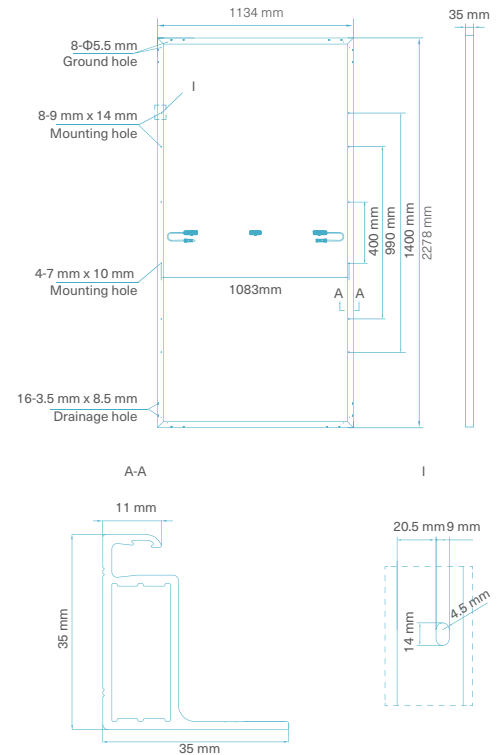


Electrical Specifications

STC rated output (P_{mpp})	530 Wp	535 Wp	540 Wp	545 Wp	550 Wp
Rated voltage (V_{mpp}) at STC	41.43 V	41.60 V	41.76 V	41.93 V	42.10 V
Rated current (I_{mpp}) at STC	12.79 A	12.86 A	12.93 A	13.00 A	13.06 A
Open circuit voltage (V_{oc}) at STC	49.30 V	49.50 V	49.70 V	49.90 V	50.10 V
Short circuit current (I_{sc}) at STC	13.52 A	13.61 A	13.72 A	13.81 A	13.90 A
Module efficiency	20.7%	20.9%	21.1%	21.3%	21.5%
Rated output (P_{mpp}) at NMOT	396.1 Wp	399.8 Wp	403.5 Wp	407.3 Wp	411.0 Wp
Rated voltage (V_{mpp}) at NMOT	38.61 V	38.77 V	38.92 V	39.08 V	39.24 V
Rated current (I_{mpp}) at NMOT	10.26 A	10.31 A	10.37 A	10.42 A	10.48 A
Open circuit voltage (V_{oc}) at NMOT	46.59 V	46.78 V	46.97 V	47.16 V	47.34 V
Short circuit current (I_{sc}) at NMOT	10.97 A	11.04 A	11.13 A	11.20 A	11.27 A
Temperature coefficient (P_{mpp})		- 0.35%/°C			
Temperature coefficient (I_{sc})		+ 0.045%/°C			
Temperature coefficient (V_{oc})		- 0.27%/°C			
Nominal module operating temperature (NMOT)		41±2°C			
Maximum system voltage (IEC/UL)		1500V _{DC}			
Number of diodes		3			
Junction box IP rating		IP 68			
Maximum series fuse rating		25 A			

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5
 NMOT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s
 Name plate tolerances: Pmax +/-3%, Voc +/-3%, Isc +/-5%

Module Dimensions



Mechanical Specifications

Outer dimensions (L x W x H)	2278 x 1134 x 35 mm
Frame technology	Aluminum, silver or black anodized
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm Landscape (standard): 1400 mm
Cable diameter (IEC/UL)	4 mm ² / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Fire performance (IEC/UL)	Class C (IEC) or Type 4 (UL)
Connector type (IEC/UL)	Stäubli MC4 EVO2 connectors (PV-KST4 EVO 2 & PV-KBT4 EVO 2)

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

Mechanical Specifications

① Module Weight	27.2 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	882 kg
Number of modules per 40'HQ container	620 pcs

① Tolerance +/- 1.0kg
 ② Subject to sales contract

Curve

