

Energizer®

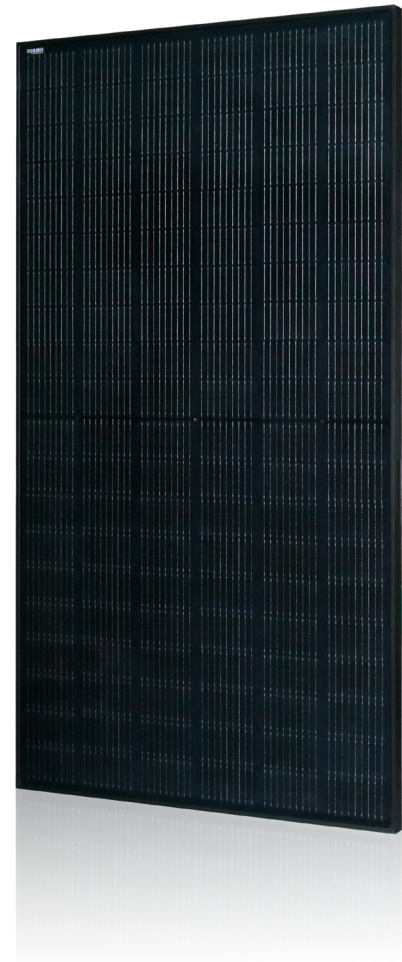
SOLAR PANELS

Beam All Black

Black Frame (166mm)

365-380W

Mono PERC Half Cell Module
ENSP60M1 Series



Key Features



Lower power loss

Better performance in shaded and low-light conditions.



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.



Lower operating temperatures

Low operating temperatures and coefficients increases performance.

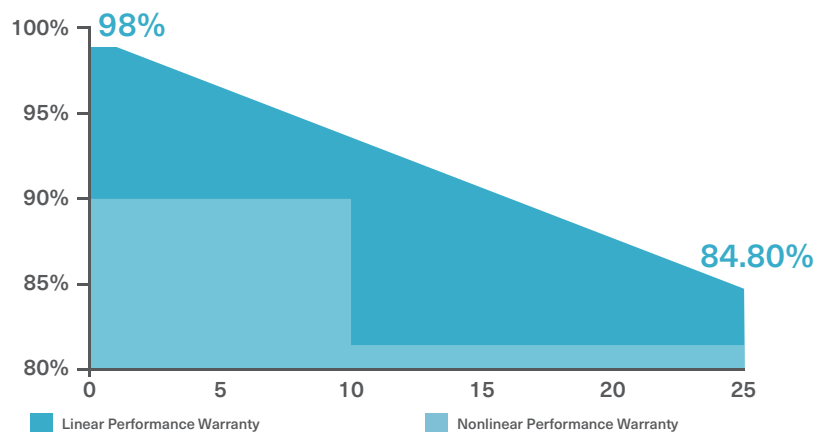
Warranty



Product warranty



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



Electrical Specifications

STC rated output (P_{mpp})	365 Wp	370 Wp	375 Wp	380 Wp
Rated voltage (V_{mpp}) at STC	33.73 V	33.98 V	34.28 V	34.51 V
Rated current (I_{mpp}) at STC	10.82 A	10.89 A	10.94 A	11.01 A
Open circuit voltage (V_{oc}) at STC	40.41 V	40.75 V	41.05 V	41.34 V
Short circuit current (I_{sc}) at STC	11.29 A	11.35 A	11.42 A	11.49 A
Module efficiency	20.0%	20.3%	20.6%	20.9%
Rated output (P_{mpp}) at NMOT	272.2 Wp	275.9 Wp	279.6 Wp	283.4 Wp
Rated voltage (V_{mpp}) at NMOT	31.45 V	31.68 V	31.96 V	32.18 V
Rated current (I_{mpp}) at NMOT	8.65 A	8.71 A	8.75 A	8.81 A
Open circuit voltage (V_{oc}) at NMOT	37.99 V	38.31 V	38.59 V	38.87 V
Short circuit current (I_{sc}) at NMOT	9.08 A	9.13 A	9.19 A	9.24 A
Temperature coefficient (P_{mpp})		- 0.35%/°C		
Temperature coefficient (I_{sc})		+ 0.050%/°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		20 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%

Mechanical Specifications

Outer dimensions (L x W x H)	1755 x 1038 x 30 mm
Frame technology	Aluminum, black anodized
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 300 mm Landscape (standard): 1200 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.

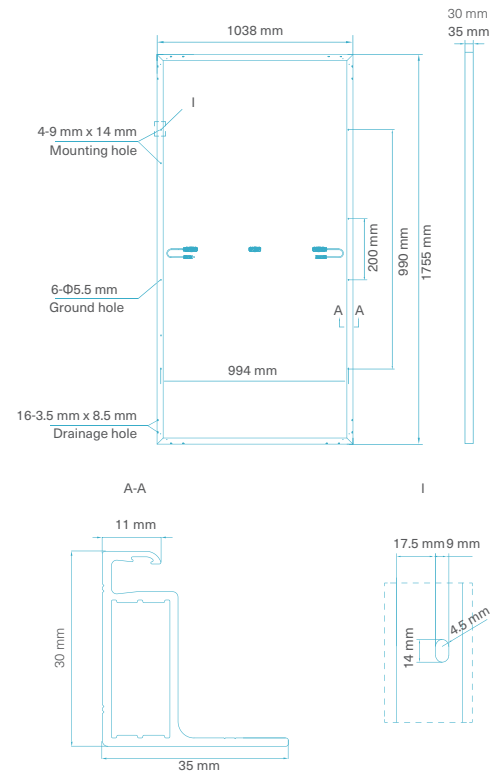
Packing Specifications

① Module Weight	19.8 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	647 kg
Number of modules per 40'HQ container	806 pcs

① Tolerance +/- 1.0kg

② Subject to sales contract

Module Dimensions



Curve

