



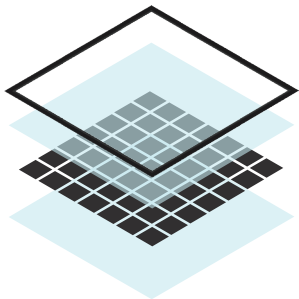
Beam N **DUAL GLASS** Solar Panel 420-435W Black Frame (182mm)

Mono PERC Half Cell Module

ENSP54NDG2420BF ENSP54NDG2430BF
ENSP54NDG2425BF ENSP54NDG2435BF



Built using Mono-crystalline PERC technology, the Energizer® Solar Panels range combine two of the best technologies in the market.



Dual Glass Construction

- Panel Frame
- Front Glass Panel
- Solar Cells
- Rear Glass Panel

Dual glass technology

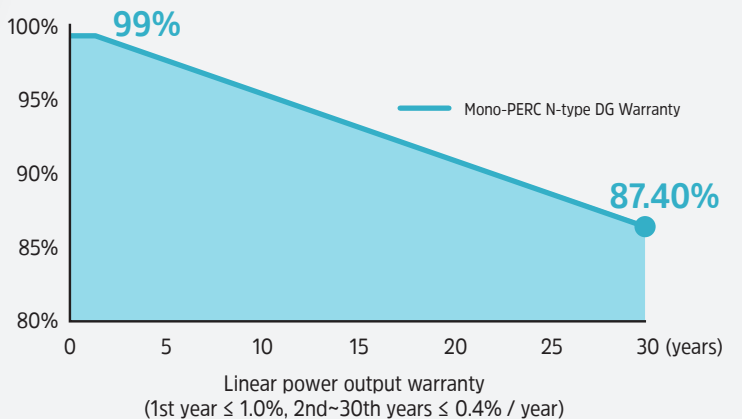
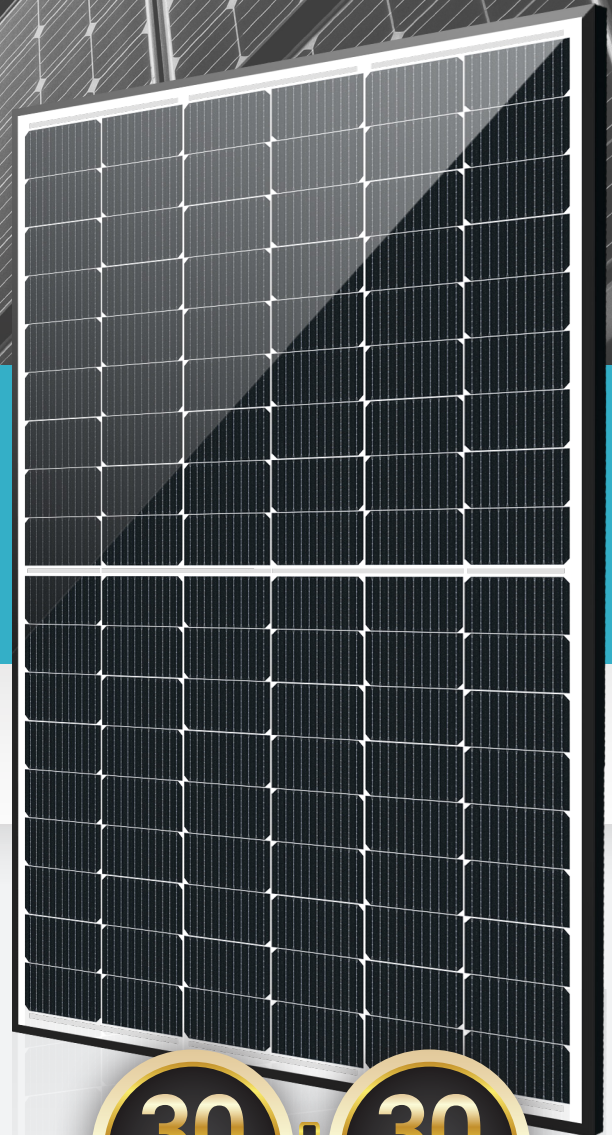
Lower operating temperatures

Improved fire & water resistance

Improved durability with no extra weight

Quality controlled by artificial intelligence

Positive power tolerance of 0~+5W



hello@energizersolar.com energizersolar.com

Electrical Specifications

STC rated output (P_{mpdp})	420 Wp	425 Wp	430 Wp	435 Wp
Rated voltage (V_{mpdp}) at STC	32.62 V	32.74 V	32.87 V	32.99 V
Rated current (I_{mpdp}) at STC	12.88 A	12.98 A	13.08 A	13.18 A
Open circuit voltage (V_{oc}) at STC	38.81 V	38.96 V	39.11 V	39.26 V
Short circuit current (I_{sc}) at STC	13.59 A	13.72 A	13.85 A	13.97 A
Module efficiency	21.5%	21.8%	22.0%	22.3%
Rated output (P_{mpdp}) at NMOT	315.8 Wp	319.6 Wp	323.4 Wp	327.1 Wp
Rated voltage (V_{mpdp}) at NMOT	30.70 V	30.82 V	30.94 V	31.06 V
Rated current (I_{mpdp}) at NMOT	10.29 A	10.37 A	10.45 A	10.53 A
Open circuit voltage (V_{oc}) at NMOT	36.87 V	37.01 V	37.15 V	37.29 V
Short circuit current (I_{sc}) at NMOT	10.97 A	11.08 A	11.18 A	11.28 A
Temperature coefficient (P_{mpdp})		- 0.29%/°C		
Temperature coefficient (I_{sc})		+ 0.043%/°C		
Temperature coefficient (V_{oc})		- 0.25%/°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 +/-3.5%, Voc +/-3.5%, Isc +/-5%

Other Specifications

Outer dimensions (L x W x H)	1722 x 1134 x 30 mm
Cell type	N type Mono-crystalline
No. of cells	108
Frame technology	Black Aluminum frame, White backing
Front glass thickness	1.6+1.6 mm
Cable length (IEC/UL)	Portrait: (+) 350mm, (-) 250mm
Cable diameter (IEC/UL)	4 mm ² / 12 AWG
Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Connector type (IEC/UL)	PV-HCB40 (Astronergy) or PV-KST4-EVO2/xy-UR, PVKBT4-EVO2/xy (Stäubli)
Module weight	20.8 kg
Packing unit	36 pcs / box
Weight of packing unit (40ft container)	793 kg
Modules per 40ft container	936 pcs
Fire Class Rating	Class A
Country of Manufacturer	China

Curve

