

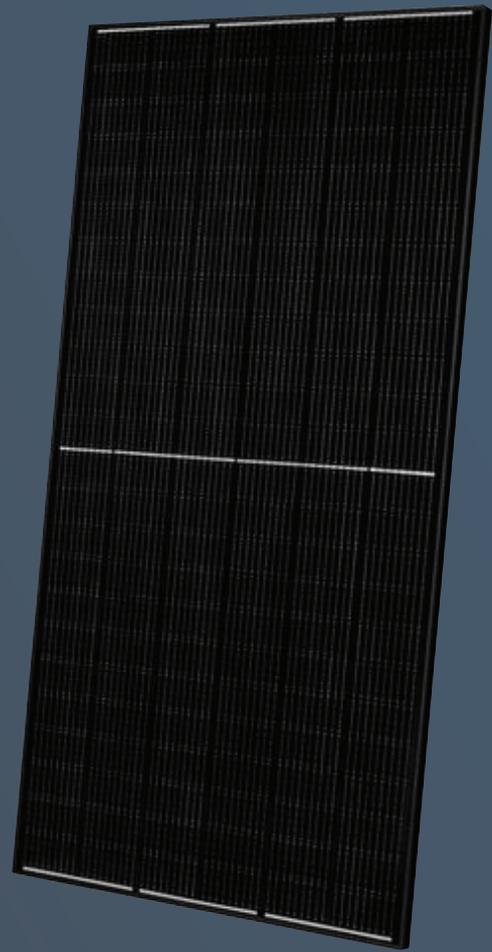
## HALF CELL LS450BL

144 CELLS  
MONOCRYSTALLINE MODULE

450W  
POWER OUTPUT RANGE

20.60%  
MAXIMUM EFFICIENCY

0 to  $\pm 3\%$   
POSITIVE POWER TOLERANCE



DESIGNED IN USA  
MADE IN ARMENIA

### 30 YEAR WARRANTY

#### Main Characteristics



Mismatch loss reduction for maximum efficiency



Reduced power loss by minimizing the effect of shadow shading



Competitive low light performance



Two EL tests to ensure the best quality

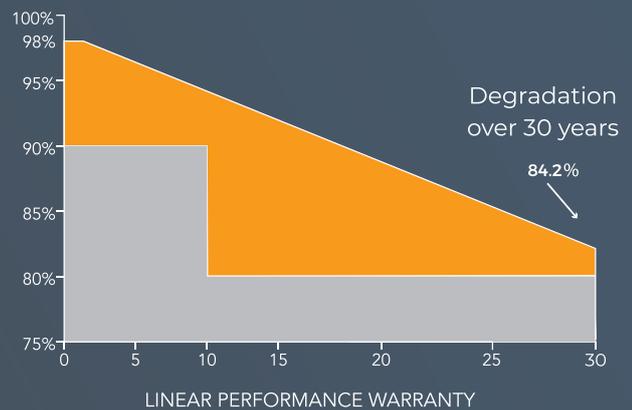


BOS's reduced and increased ROI is ideal for commercial and industrial scale projects



Proven reliability through PVEL's rigorous weatherproofing tests:

- Dust, acid, and alkali resistance, hail test
- 2400Pa wind pressure and 5400Pa snow pressure
- Anti-PID



#### QUALIFICATIONS AND CERTIFICATES



UL/IEC61215, UL/IEC61730  
ANTI-PID IEC TS 62804-1:2015  
ISO9001, ISO14001, ISO45001

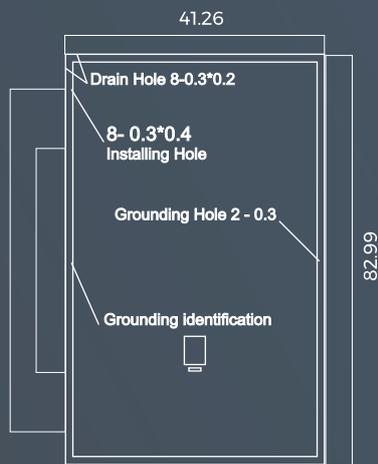


## Component Model

LS450BL

STC

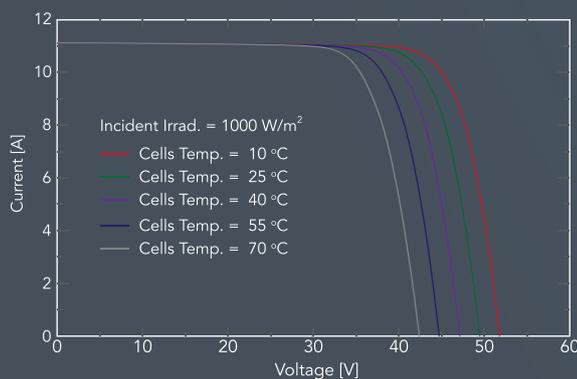
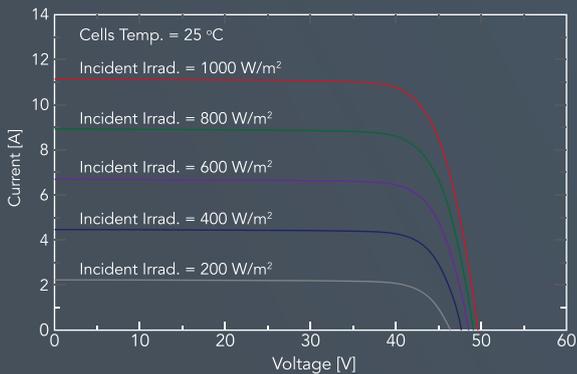
Maximum Power (Pmax)	450W
Module Efficiency	20.60%
Open Circuit Voltage (Voc)	49.60V
Short Circuit Current (Isc)	11.53A
Maximum Power Voltage (Vmp)	41.00V
Maximum Power Current (Imp)	10.98A
Power Tolerance	±3%
Maximum System Voltage	1500V
Maximum Rated Fuse Current	35A
STC: Irradiance	1000 W/m <sup>2</sup>
Module Temperature	25 °C



## Temperature Characteristics

Maximum Power Temperature Coefficient (TC Pmax)	-0.35 % / °C
Temperature Coefficient of Open Circuit Voltage (TC Voc)	-0.27 % / °C
Temperature Coefficient of Short Circuit Current (TC Isc)	0.05 % / °C
Working Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature (NOCT)	46 ± 2 °C

## Structural Characteristics



Module Size	82.99x41.26x1.38 in
Weight	52.91lbs
Cell type	MONO PERC 6.53x3.26in (144 pieces)
Class	3.2mm tempered Ar coated
Frame	Black anodized aluminum alloy
Junction Box	IP68, 3 diodes
Mechanical Load	front 5400Pa / back 2400Pa
Connector	MC4
Wire Type	compatible PV wire
Fire Performance	Type 1
Protection Class	Class II (Classified as per IEC 61140)

## Packing Method

Container	40' HQ
Quantity Per Pallet	30
Number of Pallets Per Container	22
Quantity Per Container	660