

# HALF CELL

## 430W - 450W



**144 CELL**  
 MONOCRYSTALLINE MODULE

**15 YEAR PRODUCT WARRANTY**  
**30 YEAR LINEAR POWER WARRANTY**

**430W-450W**  
 POWER OUTPUT RANGE

**20.7%**  
 MAXIMUM EFFICIENCY

**0~+3%**  
 POSITIVE POWER TOLERANCE

### • MAIN CHARACTERISTICS



Mismatch loss reduction for maximum efficiency



Reduced power loss by minimizing the effect of shadow shading



Competitive low light performance



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



Two EL tests to ensure the best quality



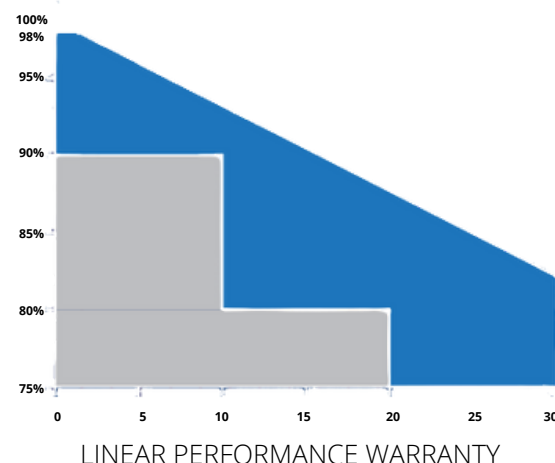
Proven reliability through PVEL's rigorous weatherproofing tests:

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

### • M2 SERIES

Tide solar redefines the high efficiency module range by combining 182mm cells with PERC and half cell technology.

The combination of innovative technology has effectively improved module efficiency and power output.

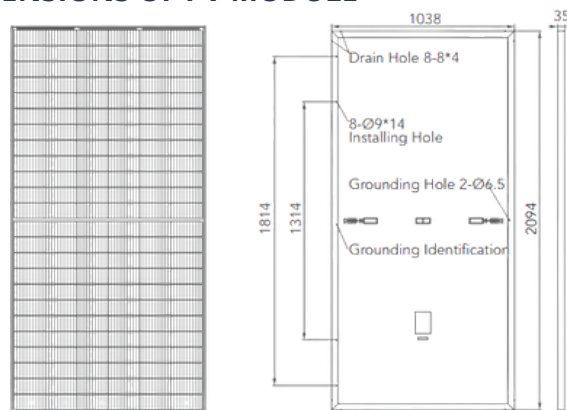


## Electrical Characteristics

Component Model	TD-430MB-144HC	TD-435MB-144HC	TD-440MB-144HC	TD-445MB-144HC	TD-450MB-144HC
	STC	STC	STC	STC	STC
Maximum Power (Pmp)	430	435	440	445	450
Open Circuit Voltage (Voc)	49.5	49.6	49.7	49.9	50.1
Short Circuit Current (Isc)	11.10	11.18	11.27	11.34	11.41
Maximum Power Voltage (Vmp)	41.2	41.3	41.4	41.6	41.8
Maximum Power Current (Imp)	10.44	10.54	10.63	10.70	10.77
Component Efficiency (NM)	19.78	20.01	20.24	20.47	20.7
Power Tolerance	( 0, +3%)				
Maximum System Voltage	1500V DC				
Maximum Rated Fuse Current	20A				

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25 oC AM=1.5

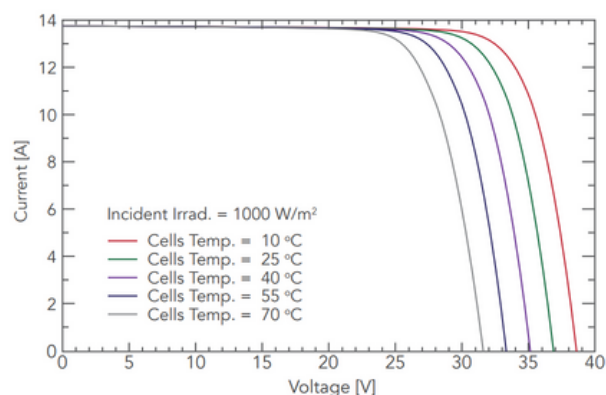
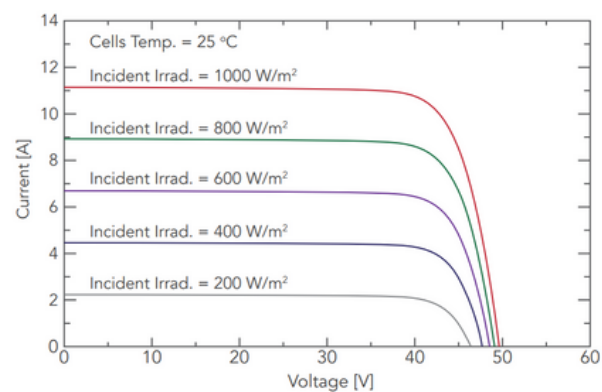
## DIMENSIONS OF PV MODULE



## Temperature Characteristics

Pmax Temperature Coefficient	-0.35%/°C
Voc Temperature Coefficient	-0.27%/°C
Isc Temperature Coefficient	+0.05%/°C
Working Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2°C

## I-V Curve



## Structural Characteristics

External Dimension	2094x1038x35mm
Weight	25 kg
Battery	single crystal PERC166x83mm (144pieces)
Glass	3.2mm coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm 2250mm(+)/ 350mm(-) or customized
Mechanical Load	Front side 5400 Pa/ back 2400 Pa

## Packing Method

	2094x1038x35mm
Container	40'HQ
Pieces per Pallet	31+2*
Pallets per Container	22
Pieces per Container	726