

# HALF CELL

## 640W-660W

### 132 CELL

MONOCRYSTALLINE MODULE

### 640W-660W

POWER OUTPUT RANGE

### 21.3%

MAXIMUM EFFICIENCY

### 0 to +3%

POSITIVE POWER TOLERANCE

15 YEAR PROUDUCT WARRANTY

30 YEAR LINEAR POWER 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



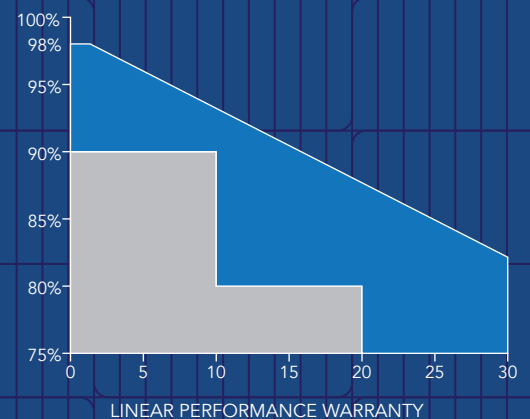
Proven reliability through PVEL's rigorous weatherproofing tests:

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

## M4 Series

Tide solar redefines the high efficiency module range by combining 210mm cells with PERC and half cell technology.

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

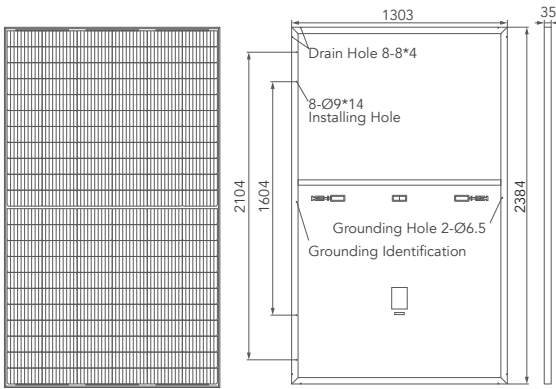


# Electrical Characteristics

Component Model	TD-640MD-132HC	TD-645MD-132HC	TD-650MD-132HC	TD-655MD-132HC	TD-660MD-132HC
Maximum Power (PMP)	STC 640	STC 645	STC 650	STC 655	STC 660
Open Circuit Voltage (VOC)	44.8	45.0	45.2	45.4	45.6
Short Circuit Current (ISC)	18.18	18.22	18.26	18.30	18.34
Maximum Power Voltage (VMP)	37.4	37.6	37.8	38.0	38.2
Maximum Power Current (IMP)	17.12	17.16	17.2	17.24	17.28
Component Efficiency ( $\eta_c$ )	20.6	20.8	20.9	21.1	21.3
Power Tolerance	(0, +3%)				
Maximum System Voltage	1500V DC				
Maximum Rated Fuse Current	30 A				

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

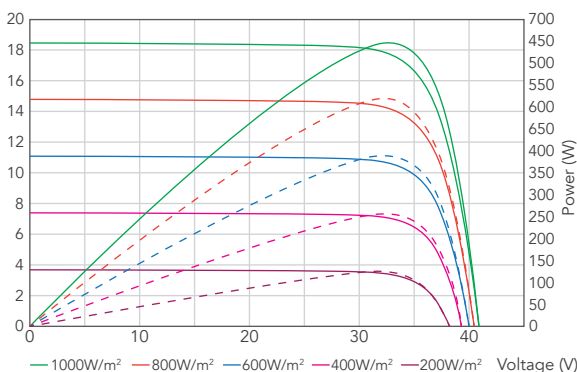
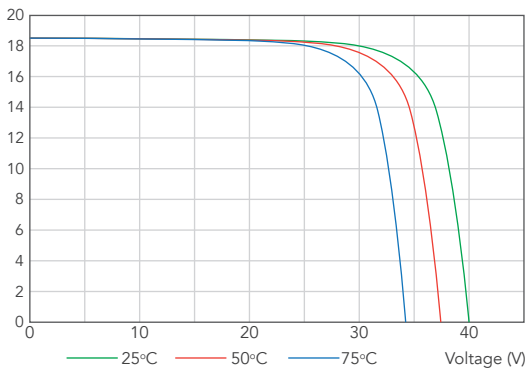
## DIMENSIONS OF PV MODULE



## Temperature Characteristics

Maximum Power Temperature Coefficient	-0.35 % / °C
Temperature Coefficient Of Open Circuit Voltage	-0.27 % / °C
Temperature Coefficient Of Short Circuit Current	+0.05 % / °C
Working Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature (NOCT)	45 ± 2 °C

## I-V Curve



## Structural Characteristics

Module Size	2384x1303x35mm
Weight	33.5kg
Battery	single crystal PERC210x105mm (132pieces)
Glass	3.2mm tempered coated glass, low iron
Frame	anodized aluminum alloy
Junction Box	IP68, 3 diodes
Output Lead	4.0mm 2250mm(+) / 350mm(-) or customized
Mechanical Load	front 5400pa / back 2400pa

## Packing Method

Module Size	2384x1303x35mm
Container	40' HQ
Quantity Per Pallet	31
Number Of Pallets Per Container	17
Quantity Per Container	527