# HALF CELL 430W-450W

**144 CELL** 

MONOCRYSTALLINE MODULE

430W-450W

POWER OUTPUT RANGE

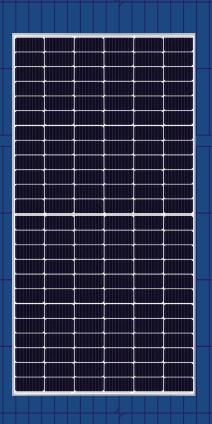
20.7%

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 minimising 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

### M2 Series

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

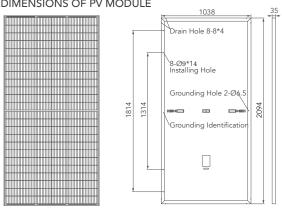
The combination of innovative technology has effectively improved module efficiency and power output.



## **Electrical Characteristics**

| Component Model   | TD-430MB-144HC | TD-435MB-144HC | TD-440MB-144HC | TD-445MB-144HC | TD-450MB-144HC |
|---|----------------|----------------|----------------|----------------|----------------|
| Maximum Power (PMP)                                       | STC            | STC            | STC            | STC            | STC            |
|   | 430            | 435            | 440            | 445            | 450            |
| Open Circuit Voltage (VOC)                                | 49.3           | 49.5           | 49.7           | 49.9           | 50.1           |
| Short Circuit Current (ISC)                               | 11.32          | 11.40          | 11.47          | 11.54          | 11.61          |
| 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 Efficency (դ, )                                 | 19.78          | 20.01          | 20.24          | 20.47          | 20.7           |
| Power Tolerance   |                |                | (0, +3%)       |                |                |
| Maximum System Voltage                                    |                |                | 1500V DC       |                |                |
| Maximum Rated Fuse Current                                |                |                | 20 A           |                |                |
| STC: Irradiance 1000 W/m² module temperature 25 °C AM=1.5 |                |                |                |                |                |

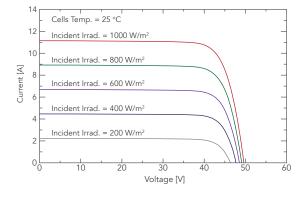
#### DIMENSIONS OF PV MODULE

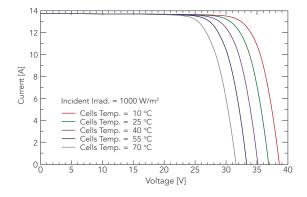


# **Temperature Characteristics**

| Maximum Power Temperature Coefficient            | -0.35 % / °C |
|--|--------------|
| Temperature Coefficient Of Open Circuit Voltage  | -0.27 % / °C |
| Temperature Confficient 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     | 2094x1038x35mm                           |
|-----------------|--|
| Weight          | 23.5kg                                   |
| Battery         | single crystal PERC166x83mm (144pieces)  |
| 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                     | 2094x1038x35mm |
|---------------------------------|----------------|
| Container                       | 40' HQ         |
| Quantity Per Pallet             | 31+2*          |
| Number Of Pallets Per Container | 22             |
| Quantity Per Container          | 726            |