

# CST-M10/66GDF

# 495-505W PERC

132 HALF-CELL BIFACIAL SOLAR MODULE

## Characteristic



**More Power**  
Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time.



**Additional power generation gain**  
Up to 25% additional power gain from back side depending on albedo



**Non-destructive Cutting**  
Minimized micro-cracks with innovative non-destructive cutting technology

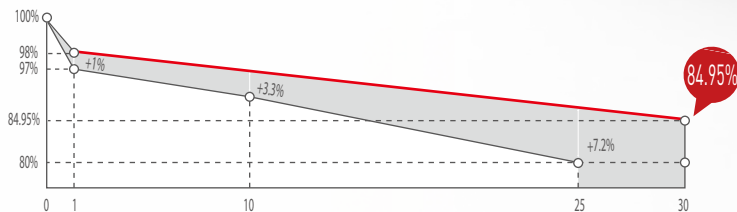


**Durability Against Extreme Environmental Conditions**  
High salt mist and ammonia resistance

**21.5%**

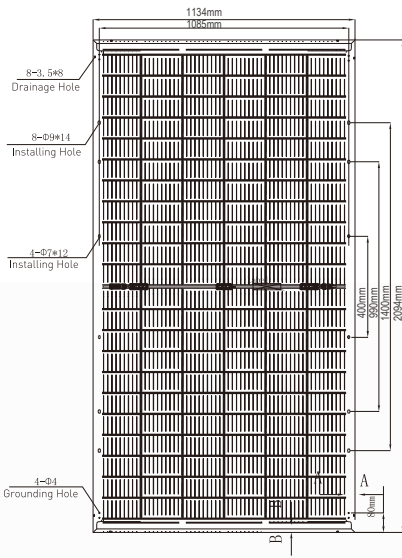
Max Module  
Efficiency

## Consort Linear Warranty

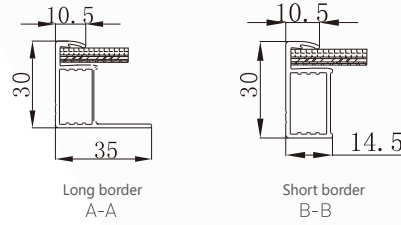


- 15 year Product Warranty
- 30 Year Linear Power Warranty
- 0.45% Annual Degradation Over 30 Years

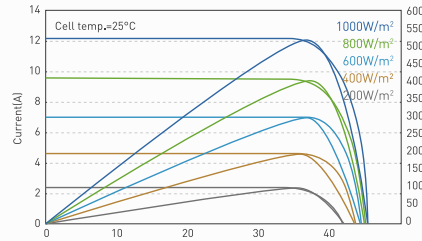
## ENGINEERING DRAWING (mm)



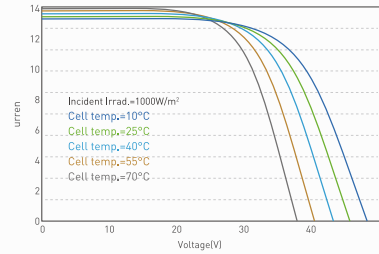
## FRAME CROSS SECTION (mm)



## I-V/P-V CURVE AT DIFFERENT IRRADIATION (500W)



## I-V CURVE AT DIFFERENT TEMPERATURE (500W)



## Electrical Characteristics (STC/NMOT)

| PV module model                | CST-M10/66GDF 490 |       | CST-M10/66GDF 495 |       | CST-M10/66GDF 500 |       | CST-M10/66GDF 505 |       | CST-M10/66GDF 510 |       |
|--------------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
|                                | STC               | NMOT  | STC               | NMOT  | STC               | NMOT  | STC               | NMOT  | STC               | NMOT  |
| Maximum Power - Pmax(W)        | 490               | 369.6 | 495               | 373.4 | 500               | 377.2 | 505               | 380.9 | 510               | 384.7 |
| Open Circuit Voltage - Voc(V)  | 44.88             | 42.46 | 45.14             | 42.70 | 45.39             | 42.94 | 45.65             | 43.18 | 45.91             | 43.43 |
| Short Circuit Current - Isc(A) | 13.73             | 11.05 | 13.78             | 11.09 | 13.83             | 11.13 | 13.88             | 11.17 | 13.93             | 11.21 |
| Voltage at Pmax-Vmp(V)         | 37.75             | 35.37 | 37.99             | 35.60 | 38.26             | 35.85 | 38.49             | 36.07 | 38.76             | 36.32 |
| Current at Pmax-Imp(A)         | 12.98             | 10.45 | 13.03             | 10.49 | 13.07             | 10.52 | 13.12             | 10.56 | 13.16             | 10.59 |
| Module Efficiency-ηm(%)        | 20.6              |       | 20.8              |       | 21.1              |       | 21.3              |       | 21.5              |       |
| Power Output Tolerance(W)      | 0~+5              |       |                   |       |                   |       |                   |       |                   |       |

STC: Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25°C, Air Mass AM1.5

NMOT: Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## Electrical Characteristics with different power bin (reference to 10% Irradiance ratio)

|                                | 539   | 545   | 550   | 556   | 561   |
|--------------------------------|-------|-------|-------|-------|-------|
| Maximum Power - Pmax(W)        | 539   | 545   | 550   | 556   | 561   |
| Open Circuit Voltage - Voc(V)  | 44.88 | 45.14 | 45.39 | 45.65 | 45.91 |
| Short Circuit Current - Isc(A) | 15.10 | 15.16 | 15.21 | 15.27 | 15.32 |
| Voltage at Pmax-Vmp(V)         | 37.75 | 37.99 | 38.26 | 38.49 | 38.76 |
| Current at Pmax-Imp(A)         | 14.28 | 14.33 | 14.38 | 14.43 | 14.47 |

## Temperature Characteristics

|   |           |
|---|-----------|
| Nominal Module Operating Temperature (NMOT) | 42±2°C    |
| Isc Temperature Coefficient                 | +0.05%/°C |
| Voc Temperature Coefficient                 | -0.28%/°C |
| Pmax Temperature Coefficient                | -0.35%/°C |

## Mechanical Data

|                     |  |
|---------------------|--|
| Number of Cells     | 182mm monocrystalline 132 pieces (66x2)                                      |
| External Dimensions | 2094x1134x30mm   |
| Weight              | 30kg   |
| Front glass         | High transparency solar glass 2.0mm  |
| Back glass          | High transparency solar glass 2.0mm  |
| Frame               | Anodized aluminum alloy  |
| Junction Box        | IP68 rated   |
| Output Cables       | 4.0mm <sup>2</sup> , 280 mm in length, length can be customized/UV resistant |
| Number Of Diodes    | 3  |
| Wind/Snow Load      | 2400Pa/5400Pa  |
| Connector           | MC compatible  |

## Maximum Ratings

|                         |           |
|-------------------------|-----------|
| Operational Temperature | -40~+85°C |
| Maximum System Voltage  | 1500V DC  |
| Max Series Fuse Rating  | 30A       |

Power measurement error +/- 3%

## Packaging Configuration

|                           |            |
|---------------------------|------------|
| Module per pallet         | 36 pieces  |
| Modules per 40' container | 792 pieces |