

# CST-M10/72GDF

# 540-550W PERC

144 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

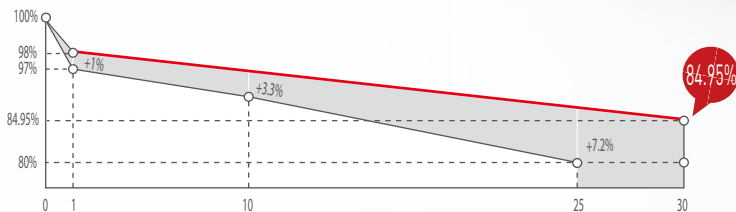


**Durability Against Extreme Environmental Conditions**  
High salt mist and ammonia resistance

**21.5%**

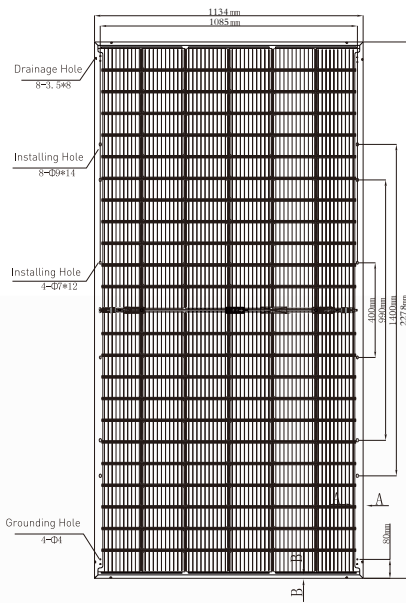
Max Module  
Efficiency

## Consort Linear Warranty

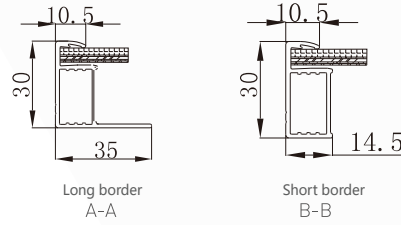


- 15 year Product Warranty
- 30 Year Linear Power Warranty
- 0.45% Annual Degradation Over 30 Years

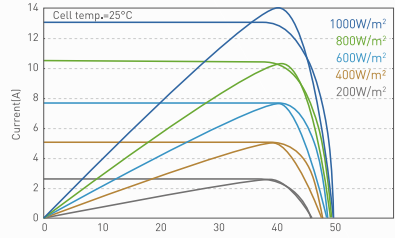
## ENGINEERING DRAWING (mm)



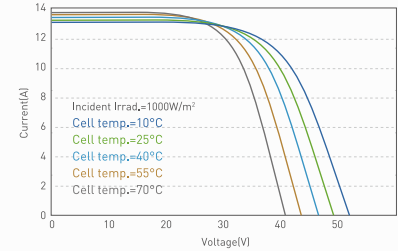
## FRAME CROSS SECTION (mm)



## I-V/P-V CURVE AT DIFFERENT IRRADIATION (550W)



## I-V CURVE AT DIFFERENT TEMPERATURE (550W)



## Electrical Characteristics (STC/NMOT)

PV module model	CST-M10/72GDF 535		CST-M10/72GDF 540		CST-M10/72GDF 545		CST-M10/72GDF 550		CST-M10/72GDF 555	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	535	404.8	540	408.6	545	412.4	550	416.2	555	420.0
Open Circuit Voltage - Voc(V)	48.96	46.21	49.24	46.48	49.52	46.74	49.80	47.01	50.08	47.28
Short Circuit Current - Isc(A)	13.73	11.00	13.78	11.04	13.83	11.08	13.88	11.12	13.93	11.16
Voltage at Pmax-Vmp(V)	41.22	38.23	41.45	38.45	41.70	38.67	41.93	38.90	42.18	39.12
Current at Pmax-Imp(A)	12.98	10.58	13.03	10.62	13.07	10.66	13.12	10.70	13.16	10.74
Module Efficiency-ηm(%)	20.7		20.9		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)

	589	594	600	605	611
Maximum Power - Pmax(W)	589	594	600	605	611
Open Circuit Voltage - Voc(V)	48.96	49.24	49.52	49.80	50.08
Short Circuit Current - Isc(A)	15.10	15.16	15.21	15.26	15.32
Voltage at Pmax-Vmp(V)	41.22	41.45	41.70	41.93	42.18
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 144 pieces (72x2)
External Dimensions	2278X1134X30mm
Weight	32.8kg
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	37 pieces
Modules per 40' container	740 pieces