

CST-M10/54GDF

405-415W PERC

108 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

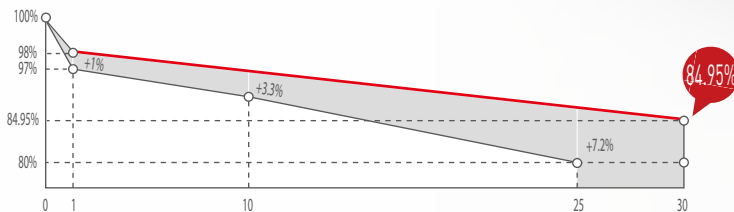


Durability Against Extreme Environmental Conditions
High salt mist and ammonia resistance

21.3%

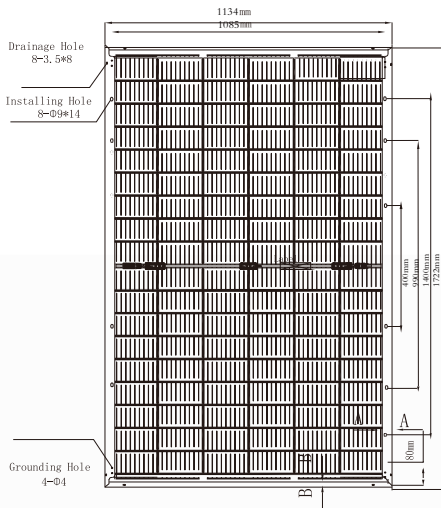
Max Module
Efficiency

Consort Linear Warranty

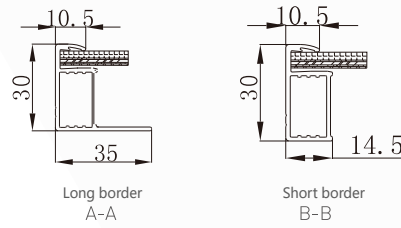


- 15 year Product Warranty
- 30 Year Linear Power Warranty
- 0.45% Annual Degradation Over 30 Years

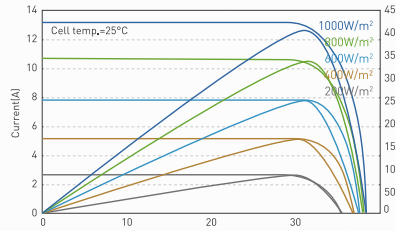
ENGINEERING DRAWING (mm)



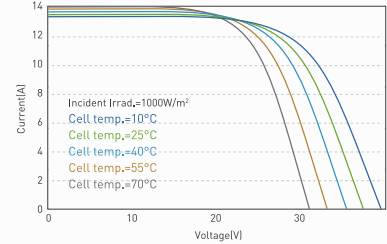
FRAME CROSS SECTION (mm)



I-V/P-V CURVE AT DIFFERENT IRRADIATION (410W)



I-V CURVE AT DIFFERENT TEMPERATURE (410W)



Electrical Characteristics (STC/NMOT)

PV module model	CST-M10/54GDF 400		CST-M10/54GDF 405		CST-M10/54GDF 410		CST-M10/54GDF 415	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	400	301.0	405	304.7	410	308.5	415	312.2
Open Circuit Voltage - Voc(V)	36.72	34.70	36.93	34.90	37.13	35.09	37.46	35.40
Short Circuit Current - Isc(A)	13.73	11.05	13.78	11.09	13.83	11.13	13.91	11.20
Voltage at Pmax-Vmp(V)	30.82	28.88	31.08	29.12	31.37	29.39	31.58	29.59
Current at Pmax-Imp(A)	12.98	10.42	13.03	10.46	13.07	10.50	13.14	10.55
Module Efficiency-ηm(%)	20.5		20.7		21.0		21.3	
Power Output Tolerance(W)	0~+5							

STC: Irradiance 1000 W/m², Module Temperature 25°C, Air Mass AM1.5

NMOT: Irradiance 800 W/m², Ambient Temperature 20°C, Wind Speed 1m/s

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

	440	446	451	457
Maximum Power - Pmax(W)	440	446	451	457
Open Circuit Voltage - Voc(V)	36.72	36.93	37.13	37.46
Short Circuit Current - Isc(A)	15.10	15.16	15.21	15.30
Voltage at Pmax-Vmp(V)	30.82	31.08	31.37	31.58
Current at Pmax-Imp(A)	14.28	14.33	14.38	14.46

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 108 pieces (54x2)
External Dimensions	1722X1134X30mm
Weight	24.4kg
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 ² , 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	936 pieces