

# CST-M10/54H

# 405-415W PERC

108 HALF-CELL MONOFACIAL MODULE

## Characteristic



Better light trapping and current collection  
Improve module power output and reliability



**PID Resistance**  
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



**Optimized electrical design**  
lower operating current for reduced hot spot loss and better temperature coefficient.

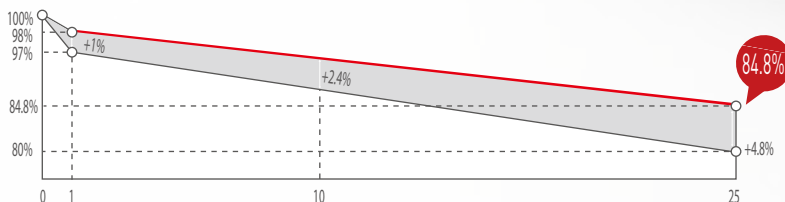


**Enhanced Mechanical Load**  
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

**21.5%**

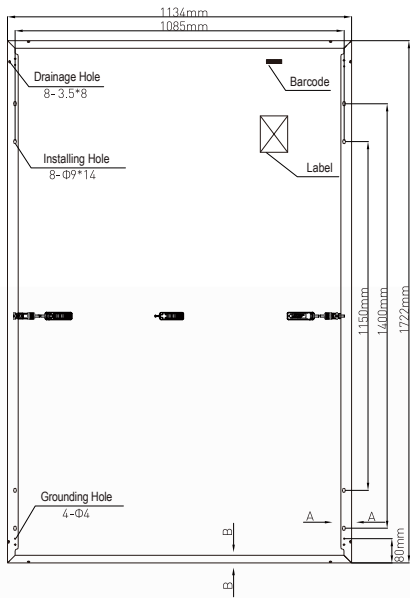
Max Module  
Efficiency

## Consort Linear Warranty

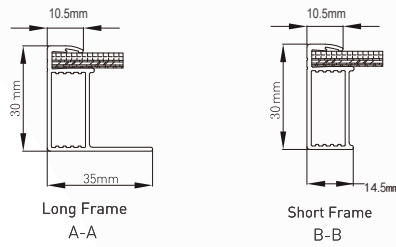


- 12 year Product Warranty
- 25 Year Linear Power Warranty
- 0.55% Annual Degradation Over 25 Years

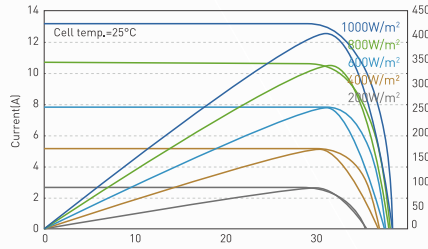
## ENGINEERING DRAWING (mm)



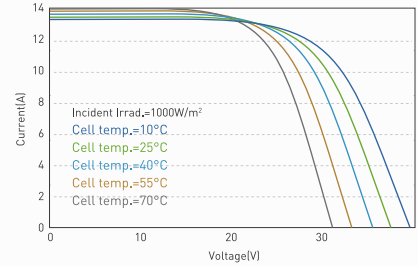
## FRAME CROSS SECTION (mm)



## I-V/P-V CURVE AT DIFFERENT IRRADIATION (415W)



## I-V CURVE AT DIFFERENT TEMPERATURE (415W)



## Electrical Characteristics (STC/NMOT)

PV module model	CST-M10/54H 400		CST-M10/54H 405		CST-M10/54H 410		CST-M10/54H 415		CST-M10/54H 420	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	400	302.8	405	306.6	410	310.3	415	314.1	420	317.9
Open Circuit Voltage - Voc(V)	36.78	34.72	36.93	34.86	37.08	35.00	37.23	35.15	37.38	35.29
Short Circuit Current - Isc(A)	13.52	10.82	13.61	10.90	13.70	10.97	13.80	11.05	13.89	11.12
Voltage at Pmax - Vmp(V)	31.01	28.76	31.16	28.90	31.31	29.04	31.46	29.18	31.61	29.32
Current at Pmax - Imp(A)	12.90	10.52	13.00	10.60	13.09	10.68	13.19	10.76	13.29	10.84
Module Efficiency - ηm(%)	20.5		20.7		21.0		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

## Mechanical Data

Number of Cells	182mm monocrystalline 108 pieces(54x2)
External Dimensions	1722x1134x30mm
Weight	20.8kg
Front glass	High transparency solar glass 3.2mm
Frame	Black, Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	4.0mm <sup>2</sup> , 280 mm in length, length can be customized/UV resistant
Wind/Snow Load	2400Pa/5400Pa
Connector	MC4 compatible

## Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	43±2°C
Isc Temperature Coefficient	+0.05%/°C
Voc Temperature Coefficient	-0.28%/°C
Pmax Temperature Coefficient	-0.36%/°C

## Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A

Power measurement error + / - 3%

## Packaging Configuration

Module per pallet	36 pieces
Modules per 40' container	936 pieces

# PARAMETER