




# CST-M10/54H





# 108 HALF-CELL MONOFACIAL MODULE 405-420W



### MORE POWER

- 
  - Up to 420W front power and 21.5% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
  - Lower resistance of half-cut and good reflection effect of MBB ensure high power
- 
  - Better light trapping and current collection to improve module power output and reliability.
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  - Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.

### MORE RELIABLE

- 
  - Minimizes micro-crack impacts
- 
  - Ensured PID resistance through cell process and module material control
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  - Durability against extreme environmental conditions
  - Resistant to salt, acid and ammonia
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  - Enhanced Mechanical Load\*  
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

\* Please refer to Consort Solar Standard Module Installation Manual for details.

**21.5%**

MAX MODULE  
EFFICIENCY

**0~+5W**

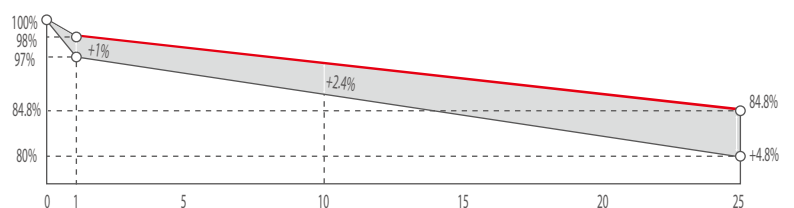
POSITIVE POWER  
TOLERANCE

### System and product certification

- IEC61215 / IEC61730 / IEC61701 / IEC62716
- ISO9001: Quality Management System
- ISO14001: Environment Management System
- OHSAS18001: Occupational Health and Safety System



### Industry-leading Warranty \*\*



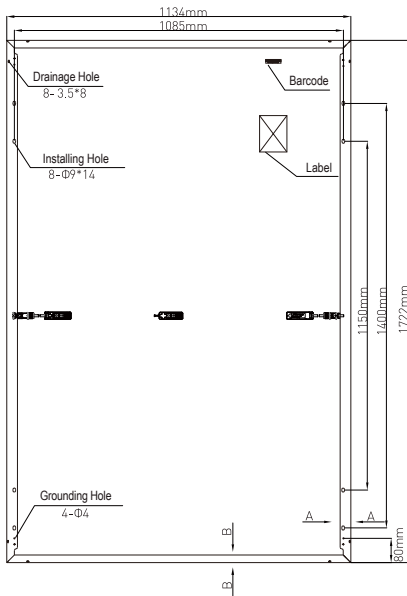
◆ First year power degradation: 2%

◆ Annual degradation: 0.55%

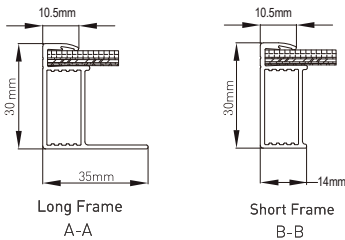
◆ Product warranty: 12 years

◆ linear warranty: 25 years

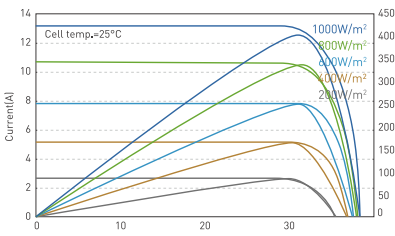
### ENGINEERING DRAWING (mm)



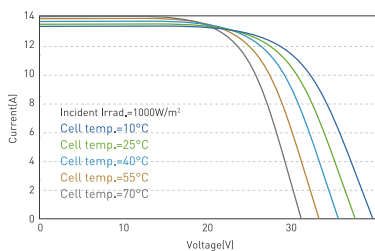
### FRAME CROSS SECTION (mm)



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



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



### Electrical Characteristics(STC)

PV module model	CST-M10/54H 405	CST-M10/54H 410	CST-M10/54H 415	CST-M10/54H 420
Maximum Power - Pmax(W)	405	410	415	420
Open Circuit Voltage - Voc(V)	36.93	37.08	37.23	37.38
Short Circuit Current - Isc(A)	13.61	13.70	13.80	13.89
Voltage at Pmax-Vmp(V)	31.16	31.31	31.46	31.61
Current at Pmax-Imp(A)	13.09	13.09	13.19	13.29
Module Efficiency-ηm(%)	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

### Electrical Characteristics(NMOT)

Maximum Power - Pmax(W)	306.6	310.3	314.1	317.9
Open Circuit Voltage - Voc(V)	34.86	35.00	35.15	35.29
Short Circuit Current - Isc(A)	10.90	10.97	11.05	11.12
Voltage at Pmax-Vmp(V)	28.90	29.04	29.18	29.32
Current at Pmax-Imp(A)	10.60	10.68	10.76	10.84

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

### Temperature Characteristics

Pmax Temperature Coefficient	-0.36%/°C
Voc Temperature Coefficient	-0.28%/°C
Isc Temperature Coefficient	+0.05%/°C
Operating Temperature	-40~+85°C
Nominal Module Operating Temperature (NMOT)	43±2°C

### Mechanical Specifications

External Dimensions	1722x1134x30mm
Weight	20.8kg
Solar Cells	182mm monocrystalline 108(6x18)pcs
Front Glass	High transparency solar glass 3.2mm
Frame	Black/Silver, Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	length can be customized/4.0mm <sup>2</sup> , cable length:280mm(+)/280mm(-)
Connector	MC4 Compatible
Wind/Snow Load	2400Pa/5400Pa
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A

### Packing Configuration

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