

# CST-M10/72H



# 144 HALF-CELL MONOFACIAL MODULE 535-555W

### MORE POWER

- Up to 555W front power and 21.7% 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.
- 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
- Durability against extreme environmental conditions
  - Resistant to salt, acid and ammonia
- 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.

**21.7%**

MAX MODULE  
EFFICIENCY

**0~+5W**

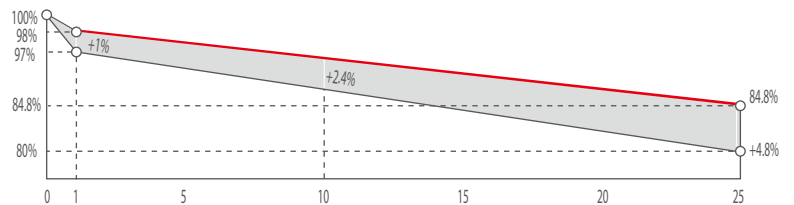
POSITIVE POWER  
TOLERANCE

### 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 \*\*



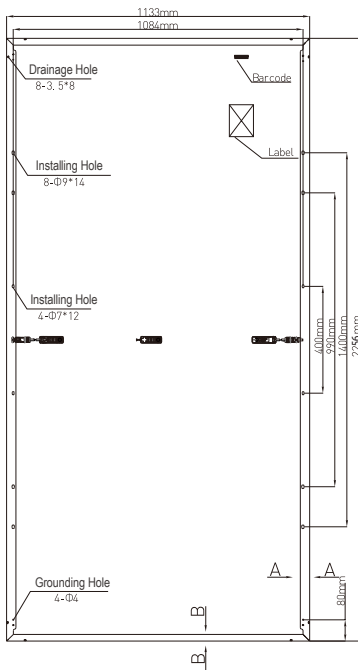
◆ First year power degradation: 2%

◆ Annual degradation: 0.55%

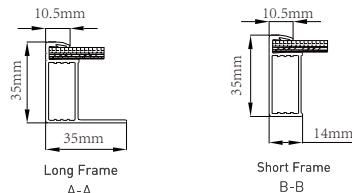
◆ Product warranty: 12 years

◆ linear warranty: 25 years

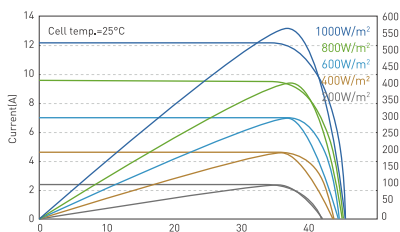
### ENGINEERING DRAWING (mm)



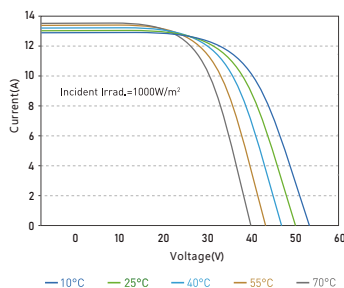
### FRAME CROSS SECTION (mm)



### I-V/P-V CURVE AT DIFFERENT IRRADIATION (555W)



### I-V CURVE AT DIFFERENT TEMPERATURE (555W)



### Electrical Characteristics(STC)

PV module model	CST-M10/72H 535	CST-M10/72H 540	CST-M10/72H 545	CST-M10/72H 550	CST-M10/72H 555
Maximum Power - Pmax(W)	535	540	545	550	555
Open Circuit Voltage - Voc(V)	49.51	49.75	49.98	50.22	50.45
Short Circuit Current - Isc(A)	13.60	13.63	13.66	13.70	13.73
Voltage at Pmax-Vmp(V)	41.77	42.06	42.35	42.64	42.93
Current at Pmax-Imp(A)	12.81	12.84	12.87	12.90	12.93
Module Efficiency-ηm(%)	20.9	21.1	21.3	21.5	21.7
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)	404.8	408.6	412.4	416.2	420.0
Open Circuit Voltage - Voc(V)	46.74	46.96	47.18	47.40	47.62
Short Circuit Current - Isc(A)	10.89	10.92	10.94	10.97	10.99
Voltage at Pmax-Vmp(V)	38.74	39.01	39.28	39.55	39.82
Current at Pmax-Imp(A)	10.45	10.47	10.50	10.52	10.55

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	2256x1133x35mm
Weight	27.5kg
Solar Cells	182mm monocrystalline 144(6x24)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	31 pieces
Modules per 40' container	620 pieces