

## CST420~460M8-72H

### 144-CELL HALF CUT Monocrystalline Solar Module

Large Size 166mm Mono PERC Solar Cell(9BB-Half)



IEC61215 : 2016  
IEC61730 : 2016

**460W**  
Maximum Power Output

**20.8%**  
Maximum Efficiency

**0~+5W**  
Positive Power Tolerance



#### Low hotspot risk

Special cutting and soldering technology leads to low hotspot risk.



#### Excellent weak light performance

More power output in weak light condition such as haze cloudy and morning.



#### Certified to withstand

Wind load (2400 Pascal) and snow load (5400 Pascal).



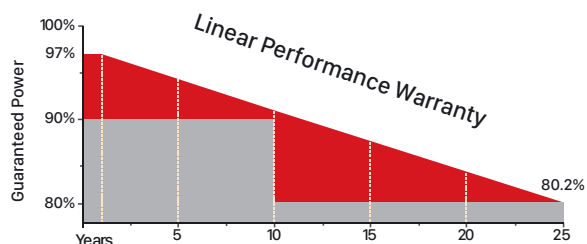
#### Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.



#### High PID resistant

Advanced cell technology and qualified materials lead to high resistance to PID.



97.0% in the first year, thereafter, for years two (2) through twenty-five (25), 0.7% maximum decrease from MODULE's nominal power output per year, ending with the 80.2% in the 25th year after the defined WARRANTY STARTING DATE.

- 12-year product warranty
- 25-year linear performance warranty

# CST420~460M8-72H

Monocrystalline

## Electrical Characteristics(STC)

PV module model	CST420M8-72H	CST425M8-72H	CST430M8-72H	CST435M8-72H	CST440M8-72H	CST445M8-72H	CST450M8-72H	CST455M8-72H	CST460M8-72H
Maximum Power - Pmax(W)	420	425	430	435	440	445	450	455	460
Open Circuit Voltage - Voc(V)	48.80	49.00	49.20	49.40	49.60	49.80	50.00	50.20	50.40
Short Circuit Current - Isc(A)	11.04	11.11	11.19	11.26	11.33	11.40	11.47	11.54	11.61
Voltage at Pmax-Vmp(V)	40.20	40.40	40.60	40.80	41.00	41.20	41.40	41.60	41.80
Current at Pmax-Imp(A)	10.45	10.52	10.60	10.67	10.74	10.81	10.88	10.95	11.02
Module Efficiency-ηm(%)	19.0	19.2	19.5	19.7	19.9	20.1	20.4	20.6	20.8
Power Output Tolerance(W)	0~+5								

STC: Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25°C, Air Mass AM1.5

## Electrical Characteristics(NOCT)

Maximum Power - Pmax(W)	315	318	322	326	330	334	338	342	345
Open Circuit Voltage - Voc(V)	45.70	45.90	46.10	46.30	46.50	46.70	46.90	47.10	47.30
Short Circuit Current - Isc(A)	8.95	9.02	9.08	9.13	9.19	9.25	9.31	9.36	9.41
Voltage at Pmax-Vmp(V)	37.30	37.50	37.70	37.90	38.10	38.20	38.30	38.40	38.50
Current at Pmax-Imp(A)	8.44	8.50	8.56	8.61	8.66	8.75	8.84	8.91	8.98

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

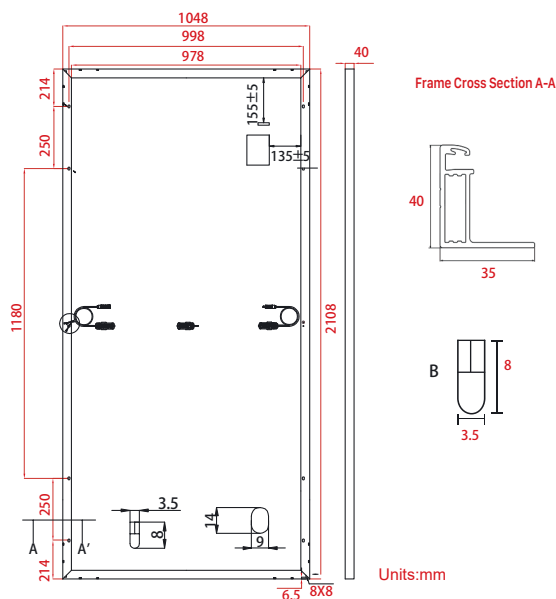
## Temperature Characteristics

Pmax Temperature Coefficient	-0.36%/°C
Voc Temperature Coefficient	-0.28%/°C
Isc Temperature Coefficient	+0.05%/°C
Operating Temperature	-40~+85°C
Nominal Operating Cell Temperature (NOCT)	41±3°C

## Mechanical Specifications

External Dimensions	2108*1048*40mm
Weight	24.0kg
Solar Cells	monocrystalline 144(72*2)pcs
Front Glass	High transparency solar glass 3.2mm
Frame	Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	4.0mm <sup>2</sup> , Landscape: N 1300mm/P 1300mm Portrait: N 150mm/P 300mm
Connector	MC4 Compatible
Wind/Snow Load	2400Pa/5400Pa
Maximum System Voltage	1000/1500V DC
Max Series Fuse Rating	20A

## Engineering Drawings

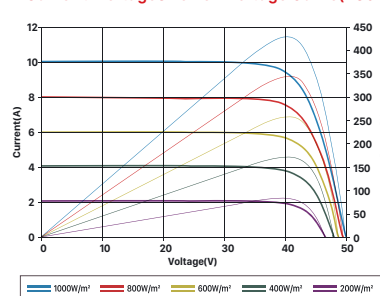


## Packing Configuration

Modules per pallet	26 pieces
Modules per 40' container	616 pieces

Packing Description: 22 Pallets, Total = (26+26+4) x 11 = 616 pieces

## Current-Voltage&Power-Voltage Curve(430W)



## Temperature Dependence of Isc, Voc, Pmax

