

CST-NT12R/66GDF

600-620W N-TOPCon

132HALF-CELL BIFACIAL SOLAR MODULE

Characteristic



High temperature power generation performance

n-type modules have a relatively low temperature coefficient. In combination with the lower module operating temperature, the power generation gain of around 2%.



PID Resistance

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



Higher Power

Output Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



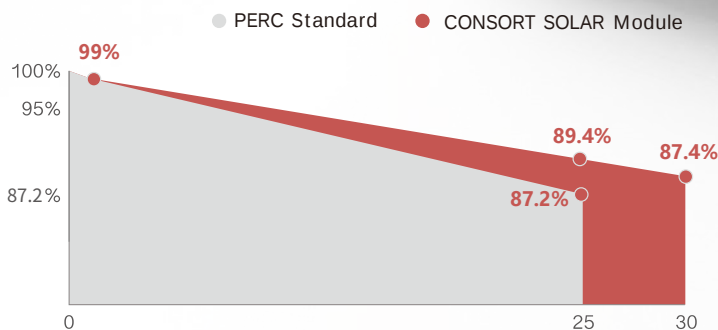
Excellent Reliability

15 Year Product Warranty ; 30 Year Linear Power Warranty ; 0.40% Annual Degradation Over 30 years.

23.0%

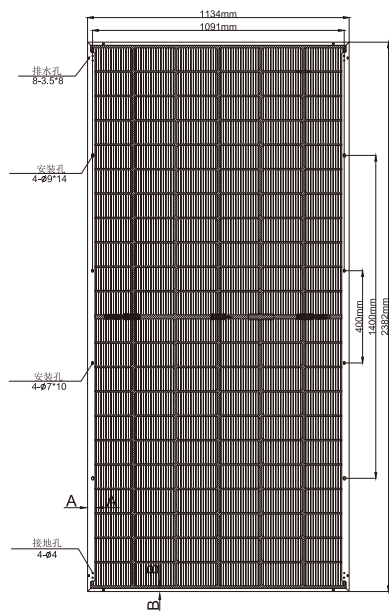
Max Module Efficiency

Consort Linear Warranty

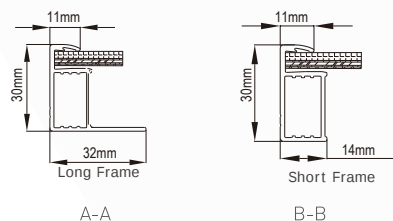


15 year Product Warranty
30 Year Linear Power Warranty
0.4% Annual Degradation Over 30 Years

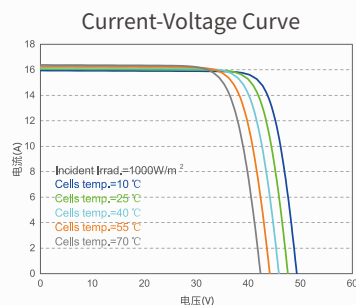
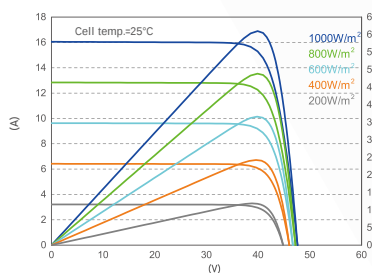
ENGINEERING DRAWING (mm)



FRAME CROSS SECTION (mm)



I-V/P-V CURVE AT DIFFERENT IRRADIATION (620W)



Electrical Characteristics (STC/NMOT)

PV module model	CST-NT12R/66GDF 600		CST-NT12R/66GDF 605		CST-NT12R/66GDF 610		CST-NT12R/66GDF 615		CST-NT12R/66GDF 620	
Front Side	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	600	451.0	605	454.4	610	457.8	615	461.3	620	464.8
Open Circuit Voltage - Voc(V)	47.80	45.02	47.95	45.16	48.10	45.30	48.25	45.44	48.40	45.58
Short Circuit Current - Isc(A)	15.75	12.72	15.80	12.76	15.85	12.80	15.90	12.84	15.95	12.88
Voltage at Pmax-Vmp(V)	40.14	37.58	40.34	37.74	40.53	37.90	40.73	38.06	40.93	38.22
Current at Pmax-Imp(A)	14.95	12.00	15.00	12.04	15.05	12.08	15.10	12.12	15.15	12.16
Module Efficiency-ηm(%)	22.2		22.4		22.6		22.8		23.0	

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)

Maximum Power - Pmax(W)	648.3	653.5	658.6	664.3	669.6
Open Circuit Voltage - Voc(V)	47.80	47.95	48.10	48.25	48.40
Short Circuit Current - Isc(A)	17.01	17.06	17.12	17.17	17.23
Voltage at Pmax-Vmp(V)	40.14	40.34	40.53	40.73	40.93
Current at Pmax-Imp(A)	16.15	16.20	16.25	16.31	16.36

Mechanical Data

Number of Cells	N-type Mono-crystalline 132 pieces(66x2)
External Dimensions	2382X1134X30mm
Weight	33kg
Front glass	High transparency solar glass 2.0mm
Back glass	High transparency solar glass 2.0mm
Frame	Black/Silver, Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	4.0m, 280mm in length, length can be customized/UV resistant
Number Of Diodes	3
Wind/Snow Load	2400Pa/5400Pa
Connector	MC compatible
Bifaciality	80±5%

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	45±2°C
Isc Temperature Coefficient	+0.045%/°C
Voc Temperature Coefficient	-0.25%/°C
Pmax Temperature Coefficient	-0.29%/°C

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	35A

Packaging Configuration

Module per box	36 pieces
Modules per 40' container	720 pieces