



CST-NT10/72GDF


570-580W N-TOPCon


144 HALF-CELL BIFACIAL SOLAR MODULE

Characteristic

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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%.
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PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.
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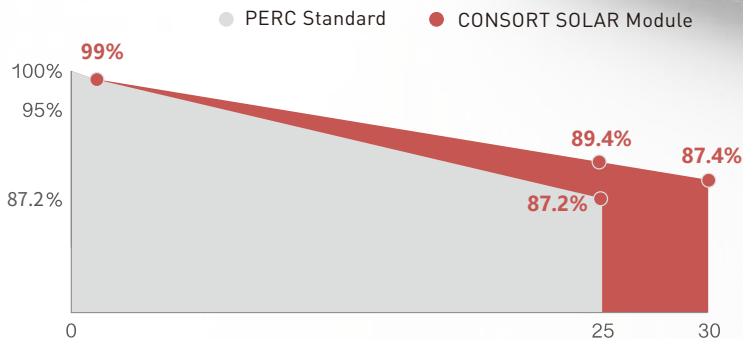
Higher Power
Output Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.
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Excellent Reliability
15 Year Product Warranty ; 30 Year Linear Power Warranty ; 0.40% Annual Degradation Over 30 years.

22.5%

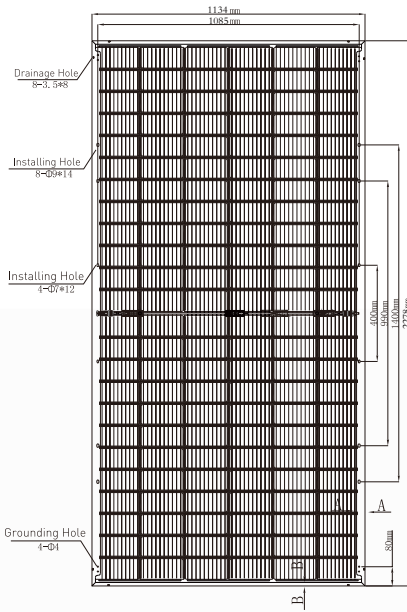
Max Module Efficiency

Consort Linear Warranty

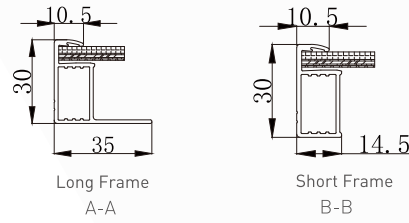


- 15 year Product Warranty
- 30 Year Linear Power Warranty
- 0.4% Annual Degradation Over 30 Years

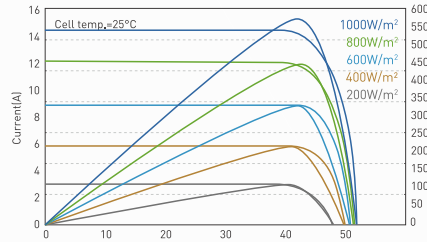
ENGINEERING DRAWING (mm)



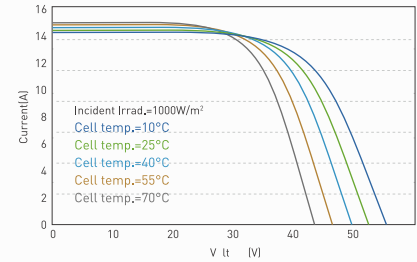
FRAME CROSS SECTION (mm)



I-V/P-V CURVE AT DIFFERENT IRRADIATION (580W)



I-V CURVE AT DIFFERENT TEMPERATURE (580W)



Electrical Characteristics (STC/NMOT)

PV module model	CST-NT10/72GDF 560		CST-NT10/72GDF 565		CST-NT10/72GDF 570		CST-NT10/72GDF 575		CST-NT10/72GDF 580	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	560	421	565	425	570	428	575	432	580	436
Open Circuit Voltage - Voc(V)	51.29	48.72	51.44	48.86	51.60	49.01	51.75	49.16	51.90	49.30
Short Circuit Current - Isc(A)	13.77	11.12	13.83	11.17	13.89	11.21	13.95	11.26	14.01	11.31
Voltage at Pmax-Vmp(V)	42.95	40.36	43.15	40.54	43.35	40.73	43.56	40.93	43.75	41.11
Current at Pmax-Imp(A)	13.04	10.43	13.09	10.47	13.15	10.52	13.20	10.56	13.26	10.60
Module Efficiency-ηm(%)	21.7		21.9		22.1		22.3		22.5	
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)

	616	622	627	633	638
Maximum Power - Pmax(W)	616	622	627	633	638
Open Circuit Voltage - Voc(V)	51.29	51.44	51.60	51.75	51.90
Short Circuit Current - Isc(A)	15.13	15.20	15.26	15.32	15.38
Voltage at Pmax-Vmp(V)	42.95	43.15	43.35	43.56	43.75
Current at Pmax-Imp(A)	14.34	14.40	14.46	14.52	14.58

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

Mechanical Data

Number of Cells	N-type Mono-crystalline 144 pieces (72x2)
External Dimensions	2278X1134X30mm
Weight	32.8kg
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	4.0mm ² , 280 mm in length, length can be customized/UV resistant
Number Of Diodes	3
Wind/Snow Load	2400Pa/5400Pa
Connector	MC compatible
Bifaciality	80±5%

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	30A

Power measurement error + / - 3%

Packaging Configuration

Module per pallet	37 pieces
Modules per 40' container	740 pieces