



CST-NT10/60GDF


475-485W N-TOPCon


120 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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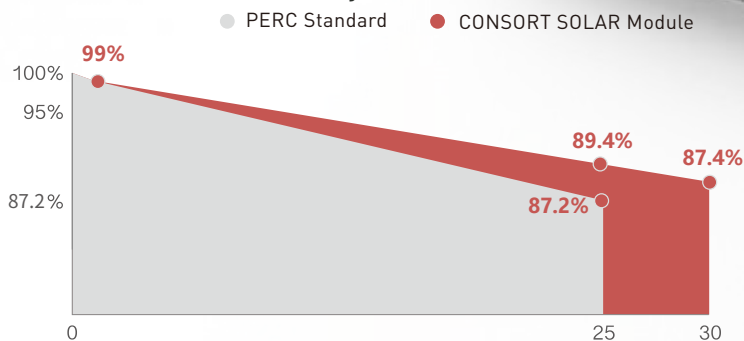
Higher Power
Output Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.
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Excellent Reliability
15 Year Product Warranty ; 30 Year Linear Power Warranty ; 0.40% Annual Degradation Over 30 years.

22.4%

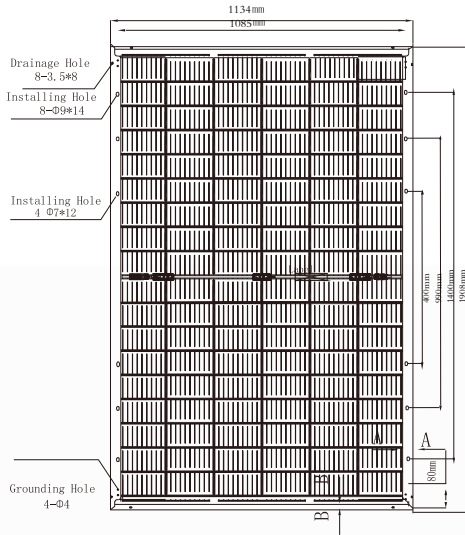
Max Module
Efficiency

Consort Linear Warranty

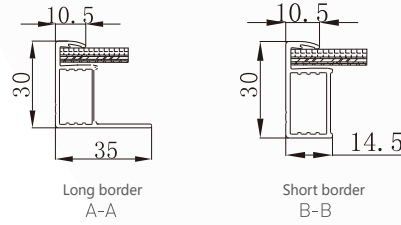


- 15 year Product Warranty
- 30 Year Linear Power Warranty
- 0.4% Annual Degradation Over 30 Years

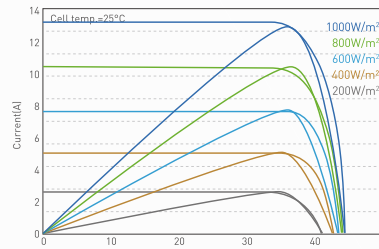
ENGINEERING DRAWING (mm)



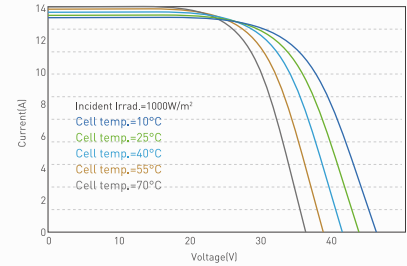
FRAME CROSS SECTION (mm)



I-V/P-V CURVE AT DIFFERENT IRRADIATION (475W)



I-V CURVE AT DIFFERENT TEMPERATURE (475W)



Electrical Characteristics (STC/NMOT)

PV module model	CST-NT10/60GDF 465		CST-NT10/60GDF 470		CST-NT10/60GDF 475		CST-NT10/60GDF 480		CST-NT10/60GDF 485	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	465	349	470	353	475	357	480	361	485	364
Open Circuit Voltage - Voc(V)	42.68	40.54	42.82	40.67	43.01	40.86	43.18	41.02	43.32	41.15
Short Circuit Current - Isc(A)	13.74	11.11	13.81	11.16	13.88	11.22	13.94	11.26	14.02	11.33
Voltage at Pmax-Vmp(V)	35.71	33.55	35.91	33.74	36.12	33.94	36.34	34.15	36.51	34.30
Current at Pmax-Imp(A)	13.02	10.41	13.09	10.47	13.15	10.52	13.21	10.56	13.28	10.62
Module Efficiency-ηm(%)	21.5		21.7		22.0		22.2		22.4	
Power Output Tolerance(W)	0~+5									

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

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

Electrical Characteristics with different power bin (reference to 10% Irradiance ratio)

	512	517	523	528	534
Maximum Power - Pmax(W)	512	517	523	528	534
Open Circuit Voltage - Voc(V)	42.68	42.82	43.01	43.18	43.32
Short Circuit Current - Isc(A)	15.11	15.19	15.26	15.33	15.42
Voltage at Pmax-Vmp(V)	35.71	35.91	36.12	36.34	36.51
Current at Pmax-Imp(A)	14.32	14.40	14.47	14.53	14.61

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 120 pieces (60x2)
External Dimensions	1908X1134X30mm
Weight	27.3kg
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	4.0mm², 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
Voc Temperature Coefficient	30A

Power measurement error +/- 3%

Packaging Configuration

Module per box	36 pieces
Modules per 40' container	864 pieces