

CST-M10/72GDF

540-550W PERC

144 HALF-CELL BIFACIAL SOLAR MODULE

Characteristic



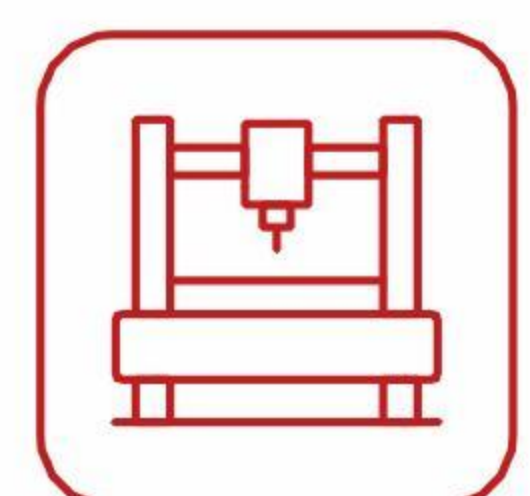
More Power

Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time.



Additional power generation gain

Up to 25% additional power gain from back side depending on albedo



Non-destructive Cutting

Minimized micro-cracks with innovative non-destructive cutting technology



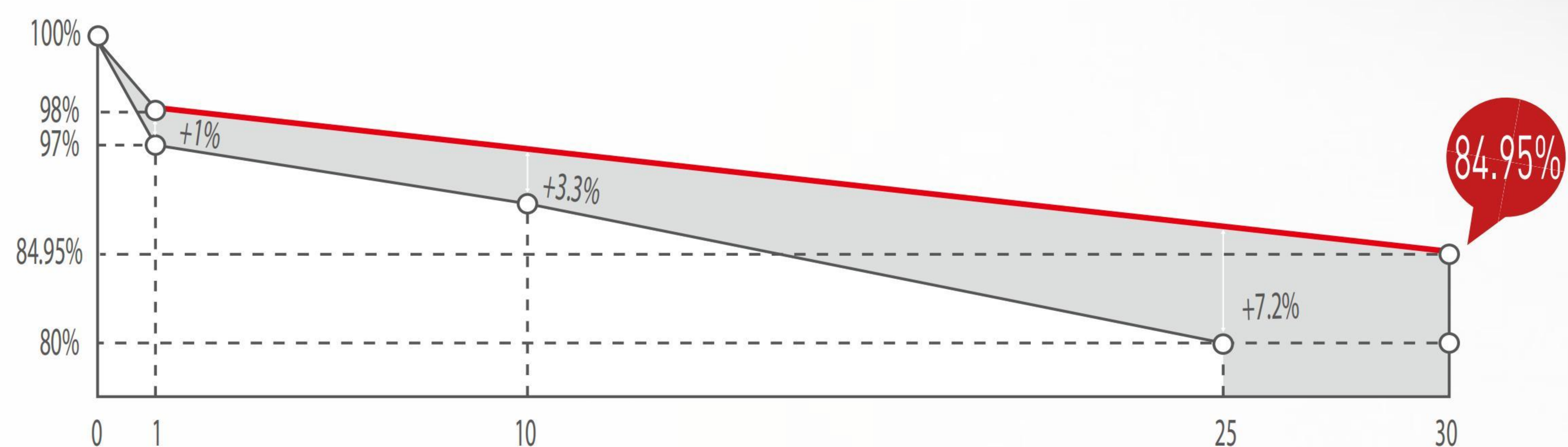
Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance

21.5%

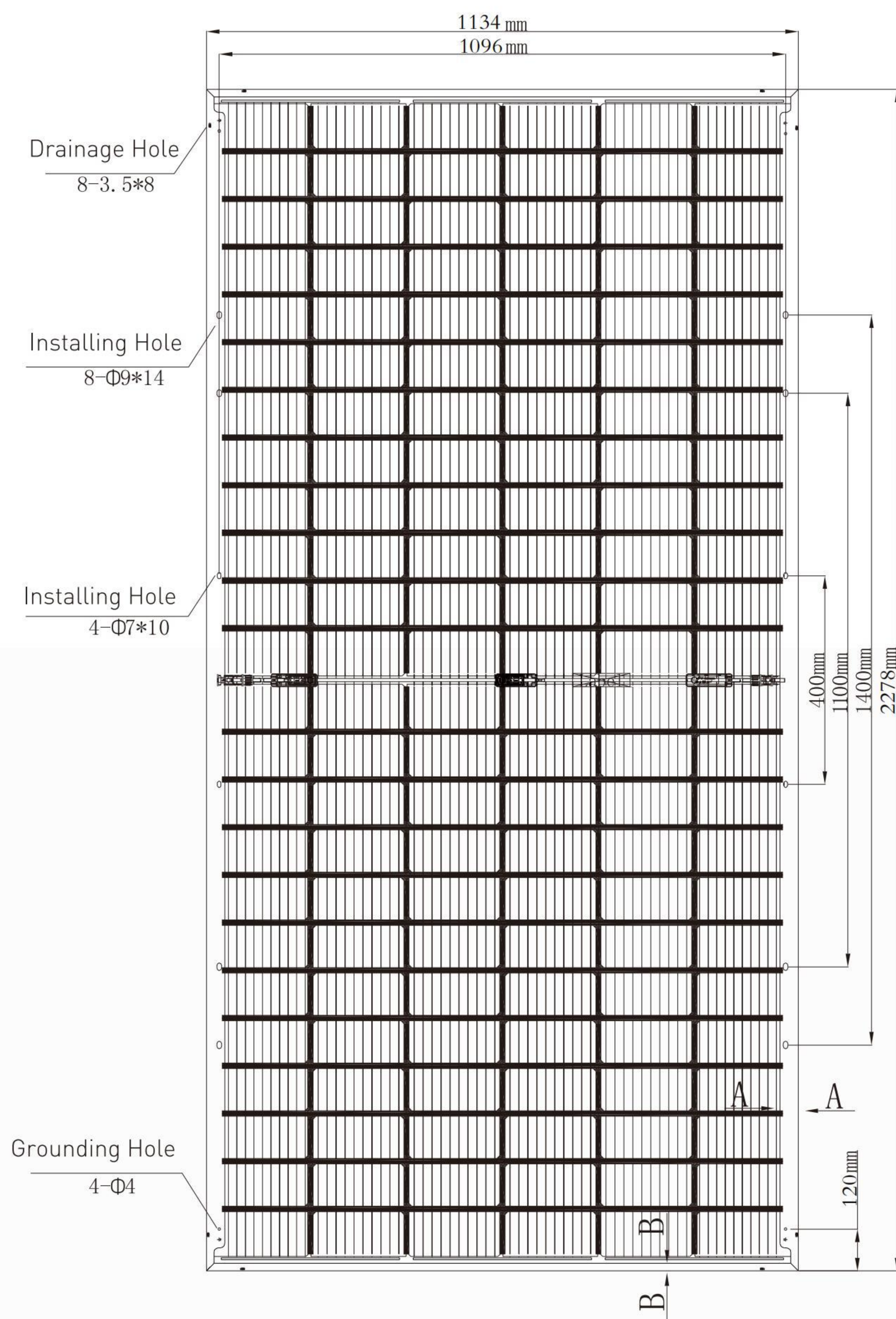
Max Module
Efficiency

Consort Linear Warranty

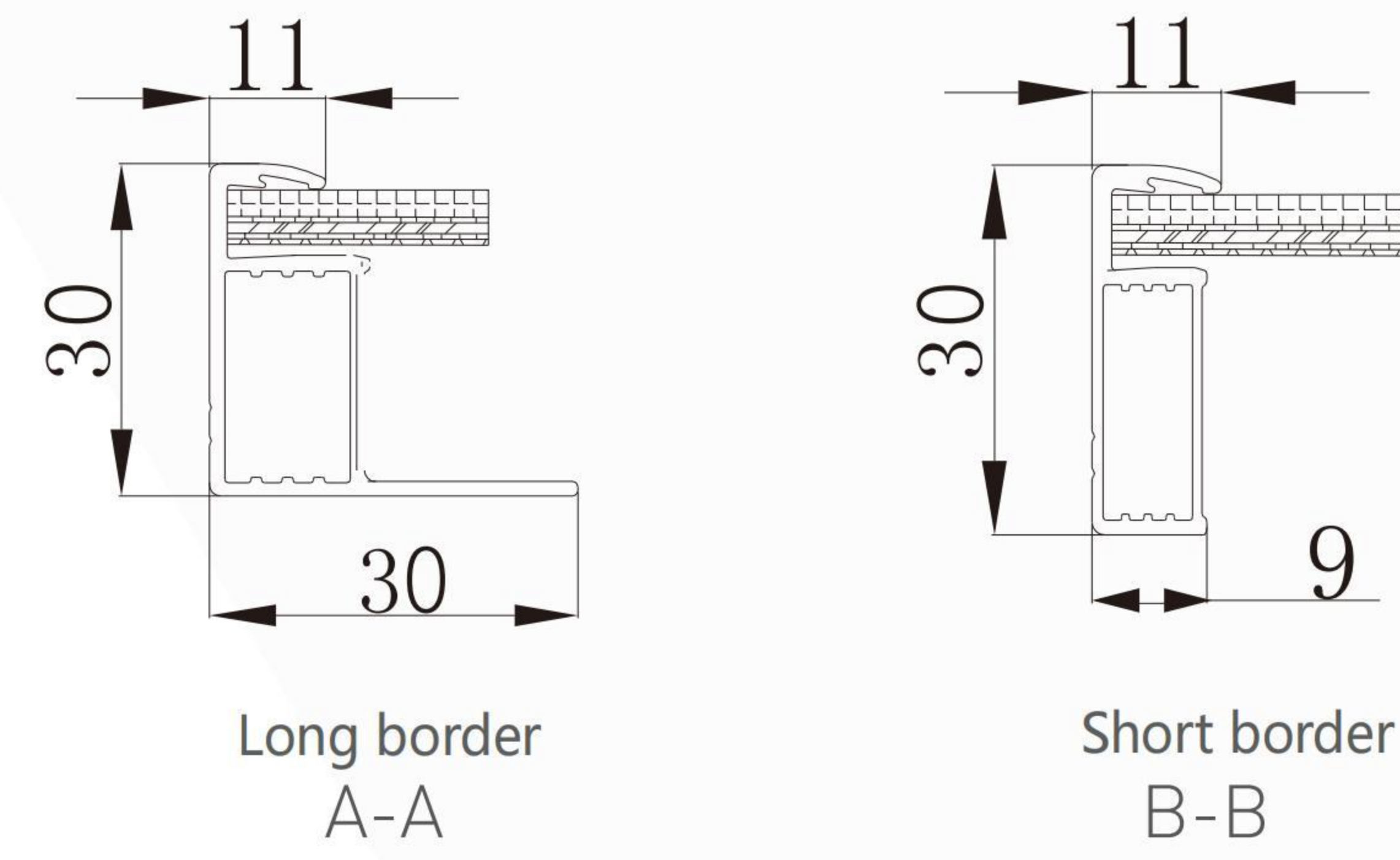


- 15 year Product Warranty
- 30 Year Linear Power Warranty
- 0.45% Annual Degradation Over 30 Years

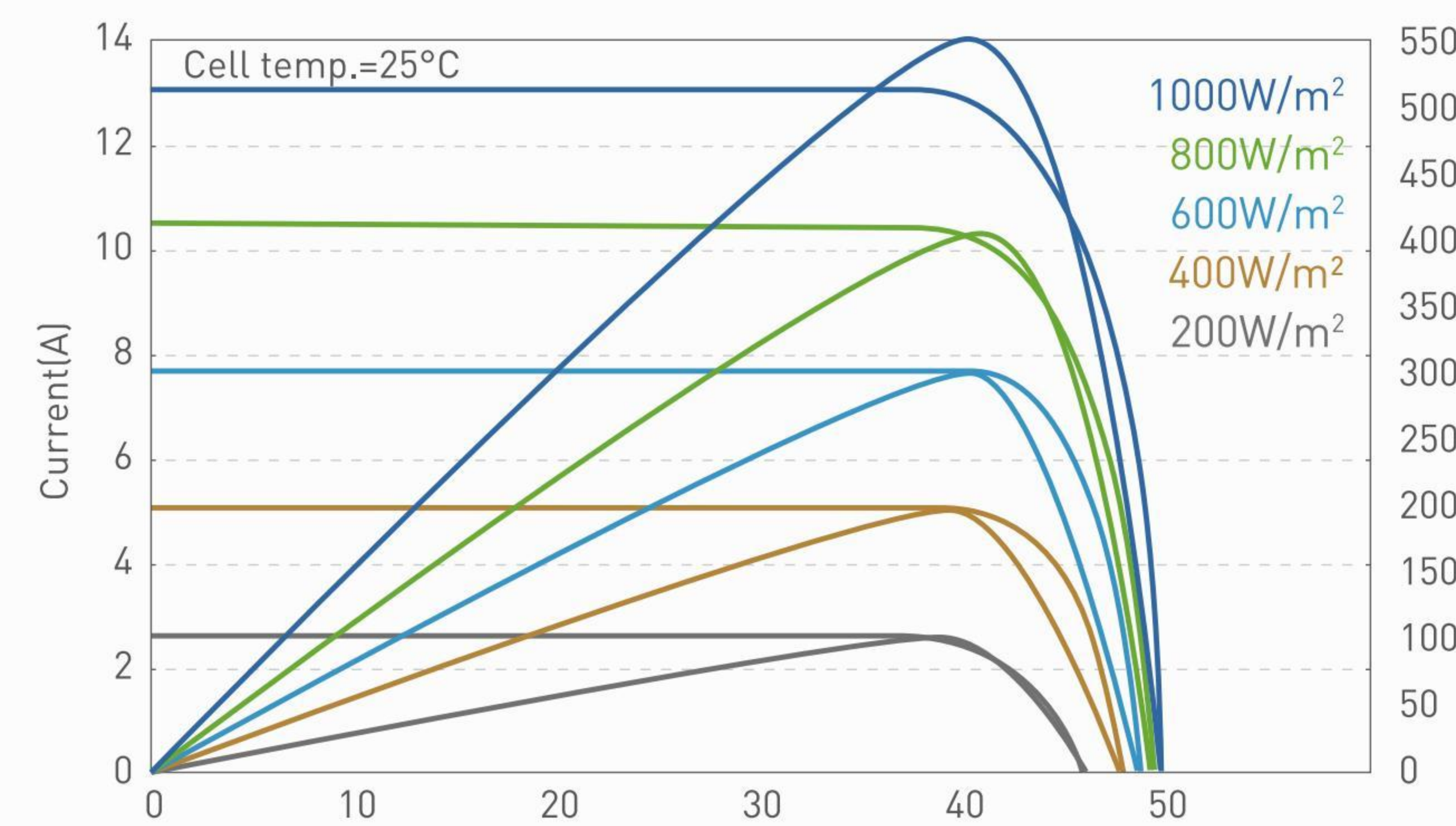
ENGINEERING DRAWING (mm)



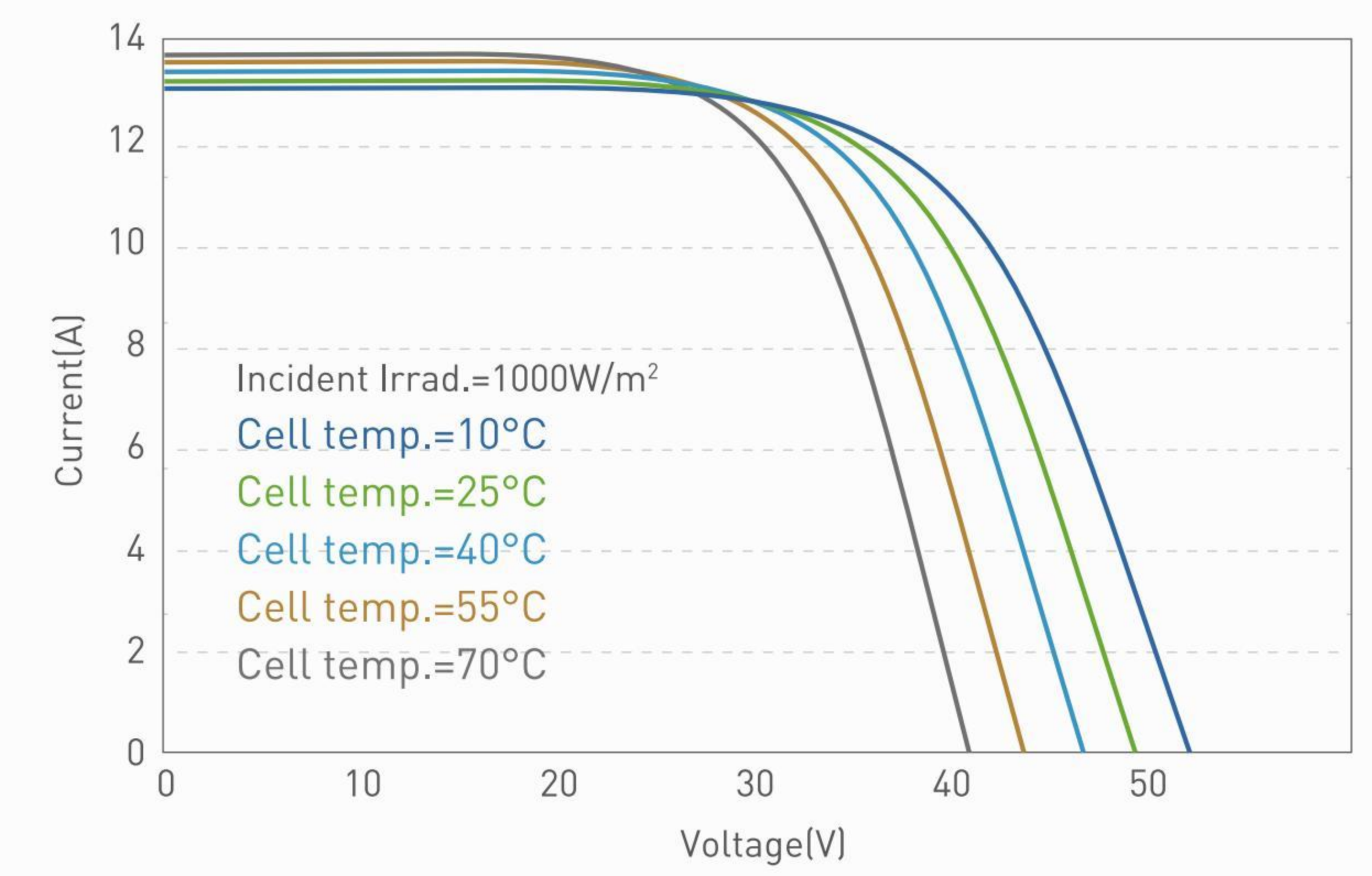
FRAME CROSS SECTION (mm)



I-V/P-V CURVE AT DIFFERENT IRRADIATION (550W)



I-V CURVE AT DIFFERENT TEMPERATURE (550W)



Electrical Characteristics (STC/NMOT)

PV module model	CST-M10/72GDF 535		CST-M10/72GDF 540		CST-M10/72GDF 545		CST-M10/72GDF 550		CST-M10/72GDF 555	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Front Side	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power - Pmax(W)	535	404.8	540	408.6	545	412.4	550	416.2	555	420.0
Open Circuit Voltage - Voc(V)	48.96	46.21	49.24	46.48	49.52	46.74	49.80	47.01	50.08	47.28
Short Circuit Current - Isc(A)	13.73	11.00	13.78	11.04	13.83	11.08	13.88	11.12	13.93	11.16
Voltage at Pmax-Vmp(V)	41.22	38.23	41.45	38.45	41.70	38.67	41.93	38.90	42.18	39.12
Current at Pmax-Imp(A)	12.98	10.58	13.03	10.62	13.07	10.66	13.12	10.70	13.16	10.74
Module Efficiency-ηm(%)	20.7		20.9		21.1		21.3		21.5	
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)

Maximum Power - Pmax(W)	589	594	600	605	611
Open Circuit Voltage - Voc(V)	48.96	49.24	49.52	49.80	50.08
Short Circuit Current - Isc(A)	15.10	15.16	15.21	15.26	15.32
Voltage at Pmax-Vmp(V)	41.22	41.45	41.70	41.93	42.18
Current at Pmax-Imp(A)	14.28	14.33	14.38	14.43	14.47

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42±2°C
Isc Temperature Coefficient	+0.05%/°C
Voc Temperature Coefficient	-0.28%/°C
Pmax Temperature Coefficient	-0.35%/°C

Mechanical Data

Number of Cells	182mm monocrystalline 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	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

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	740 pieces