

GAUTAM SOLAR

N-type TOPCon

Bifacial

Glass to Glass

BIS

APPROVED



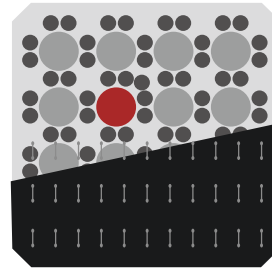
580 Wp - 590 Wp

22.84% Max. Efficiency

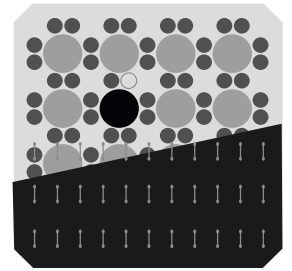
Ideal for **Utility** & **Commercial** Installations

30% More Power than P-Type Module

● Silicon ● Electron ● Phosphorus ● Boron

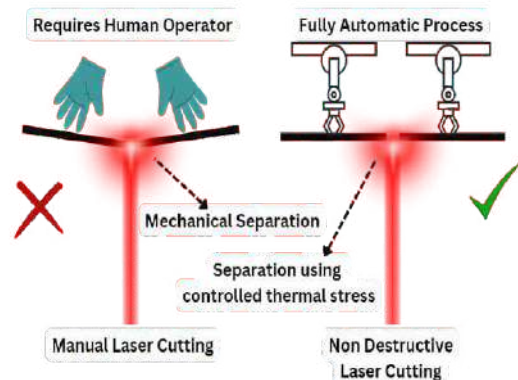


N type solar cells



P type solar cells

Non-Destructive Cutting Machine for Lower Stresses



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FRONT SIDE ELECTRICAL DATA (STC)			
Peak Power Output -Pmax(Wp)	580	585	590
Power Output Tolerance (Wp)	0 ~ +5	0 ~ +5	0 ~ +5
Open Circuit Voltage-Voc(V)	51.04	51.19	51.34
Maximum Power Voltage-Vmpp(V)	42.37	42.52	42.67
Short circuit current-Isc(A)	14.45	14.52	14.59
Maximum Power Current-Imp(A)	13.69	13.76	13.83
Module Efficiency (%)	22.45	22.65	22.84
Fill Factor (%)	78.64	78.71	78.77

*(STC) = 1000 W/m² Irradiance, Air Mass 1.5 and 25°C Cell Temperature

ELECTRICAL DATA (NOCT)			
Peak Power Output -Pmax(Wp)	430.94	434.66	438.37
Open Circuit Current-Voc(V)	47.47	47.61	47.75
Maximum Power Voltage-Vmpp(V)	38.68	38.91	39.04
Short circuit current-Isc(A)	11.73	11.79	11.85
Maximum Power Current-Imp(A)	11.12	11.17	11.23

*(NOCT) = 800 W / m² Irradiance, Air Mass 1.5, Ambient Temperature 20°C and Wind Speed 1 m/s

TOTAL POWER (FRONT+BACK)			
With 10% Gain	Peak Power (Wp)	638	644
	Efficiency η (%)	24.70	24.93
With 15% Gain	Peak Power (Wp)	667	673
	Efficiency η (%)	25.82	26.05
With 20% Gain	Peak Power (Wp)	696	702
	Efficiency η (%)	26.94	27.18
With 25% Gain	Peak Power (Wp)	725	731
	Efficiency η (%)	28.07	28.30
With 30% Gain	Peak Power (Wp)	754	761
	Efficiency η (%)	29.19	29.46

MECHANICAL DATA	
Solar Cells Per Module	144
Cells Configuration (Matrix)	12x6 12x6
Cell Size (mm)	91x182
Length(L)xWidth(W)xThickness(T) in mm	2278x1134x35
Area of module (sq-m)	2.583252
Weight of module(kg)	32.0± 2%

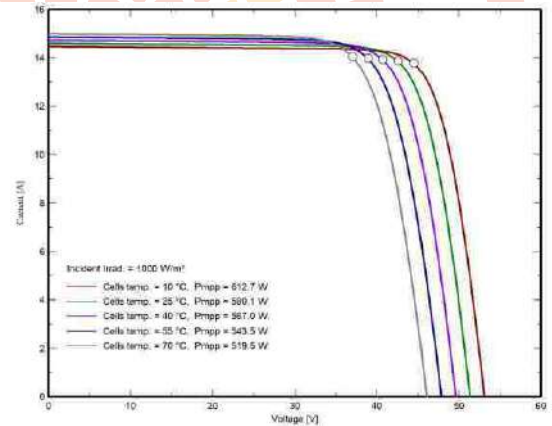
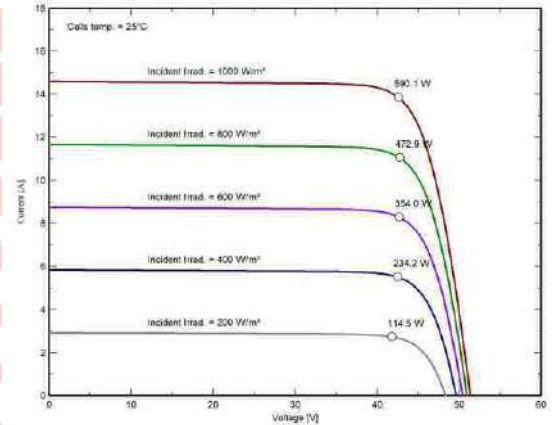
Cell Type	N-type Mono-crystalline (Ø182)
Junction Box	IP 68 rated Split Junction Box with Individual Bypass Diodes
Connector	IP 68 rated MC4 Compatible
Front Cover(Glass)	2.0 mm Low Iron High Transmission AR Coated Tempered Glass
Back Cover (Glass)	2.0 mm Low Iron High Transmission AR Coated Tempered Glass
Encapsulant	PID Free and UV Resistant
Frame	Anodized Aluminum Frame
Application Class Rating	Class A
Safety Class Rating	Class II
Fire Safety	Class C
Mechanical Load	Snow Load 5400 Pa, Wind Load 2400 Pa
Cable Type	4 mm ²

TEMPERATURE RATINGS	
NOCT	45°C ± 2°C
Temperature Coefficient of Pmax	-0.29% /°C
Temperature Coefficient of Voc	-0.25% /°C
Temperature coefficient of Isc	0.045% /°C
Temperature Range	-40°C to +85°C

Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A

PACKING CONFIGURATION	
Container	40' HQ
Pieces per Pallet	31
Pallets per container	20
Pieces per container	620

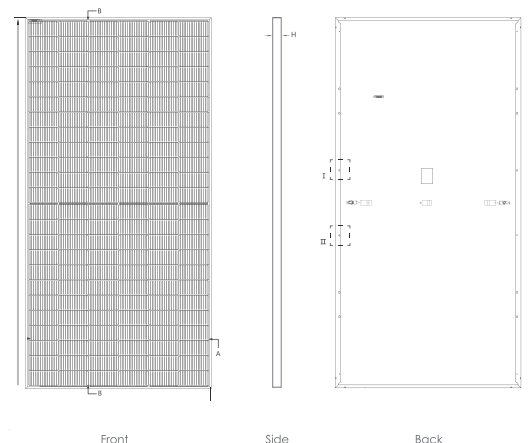
Characteristic Curves



12 Years Product Warranty

30 Years Power Output Warranty

Engineering Drawings



Front

Side

Back