

# BIS

APPROVED

Certified as Per **UL & IEC** Certified

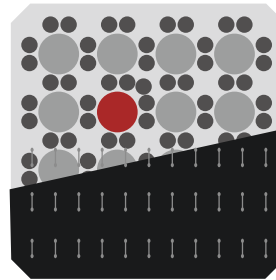
## 580 Wp - 590 Wp

### 22.84% Max. Efficiency

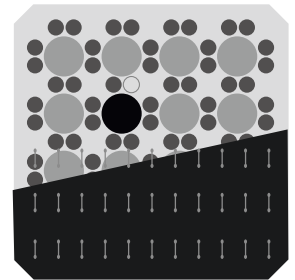
Ideal for **Utility** & **Commercial** Installations

### More Power than P-Type Module

● Silicon ● Electron ● Phosphorus ● Boron

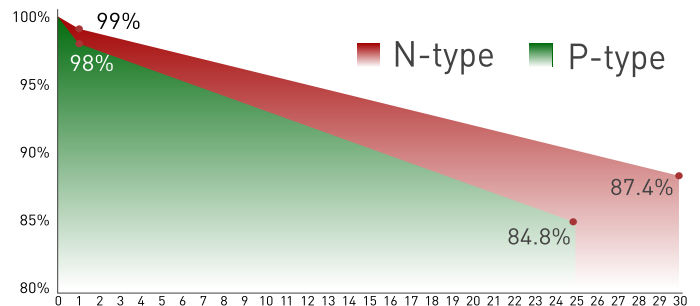


N type solar cells

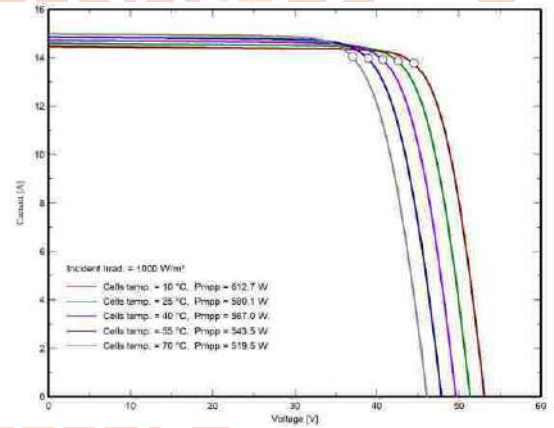
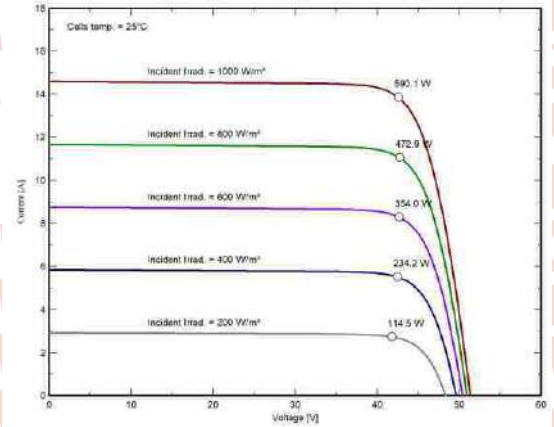


P type solar cells

### Lower Performance Degradation



### Characteristic Curves



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)	50.10	50.20	50.30
Maximum Power Voltage-Vmpp(V)	42.65	42.75	42.85
Short circuit current-Isc(A)	14.54	14.64	14.74
Maximum Power Current-Impp(A)	13.60	13.68	13.77
Module Efficiency (%)	22.45	22.65	22.84
Fill Factor (%)	79.62	79.60	79.58

\*(STC) = 1000 W/m<sup>2</sup> 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)	46.59	46.69	46.78
Maximum Power Voltage-Vmpp(V)	38.94	39.03	39.12
Short circuit current-Isc(A)	11.81	11.89	11.97
Maximum Power Current-Impp(A)	11.04	11.11	11.18

\*(NOCT) = 800 W/m<sup>2</sup> Irradiance, Air Mass 1.5, Ambient Temperature 20°C and Wind Speed 1 m/s

MECHANICAL DATA	
Solar Cells Per Module (units)	144
Cells Configuration (Matrix)	12 × 6    12 × 6
Cell Size(mm)	91 × 182
Length(L) × Width(W) × Thickness(T) in mm	2278 × 1134 × 35
Area of module (sq-m)	2.583252
Weight of module(kg)	27.1 ± 2%

Cell Type	N-type Mono-crystalline (91 × 182)
Junction Box	IP 68 rated Split Junction Box with Individual Bypass Diode
Connector	IP 68 rated MC4 Compatible
Front Cover(Glass)	3.2 mm Low Iron High Transmission AR Coated Tempered Glass
Back Cover (Backsheet)	Poly Vinyl Fluoride (Composite Film)
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 <sup>2</sup>

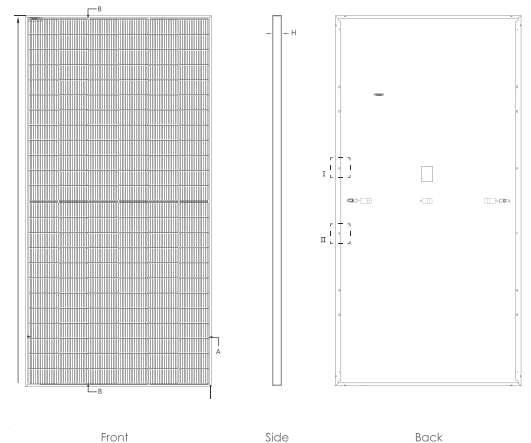
TEMPERATURE RATINGS	
NOCT	45°C ± 2°C
Temperature Coefficient of Pmax	-0.29% /°C
Temperature Coefficient of Voc	-0.25% /°C
Temperature coefficient of Isc	0.045% /°C
Temperature Range	-40°C to +85°C

Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A

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

**12 Years Product Warranty**  
**30 Years Power Output Warranty**

### Engineering Drawings



Front Side Back