

Premium Quality

# Solar PV Modules

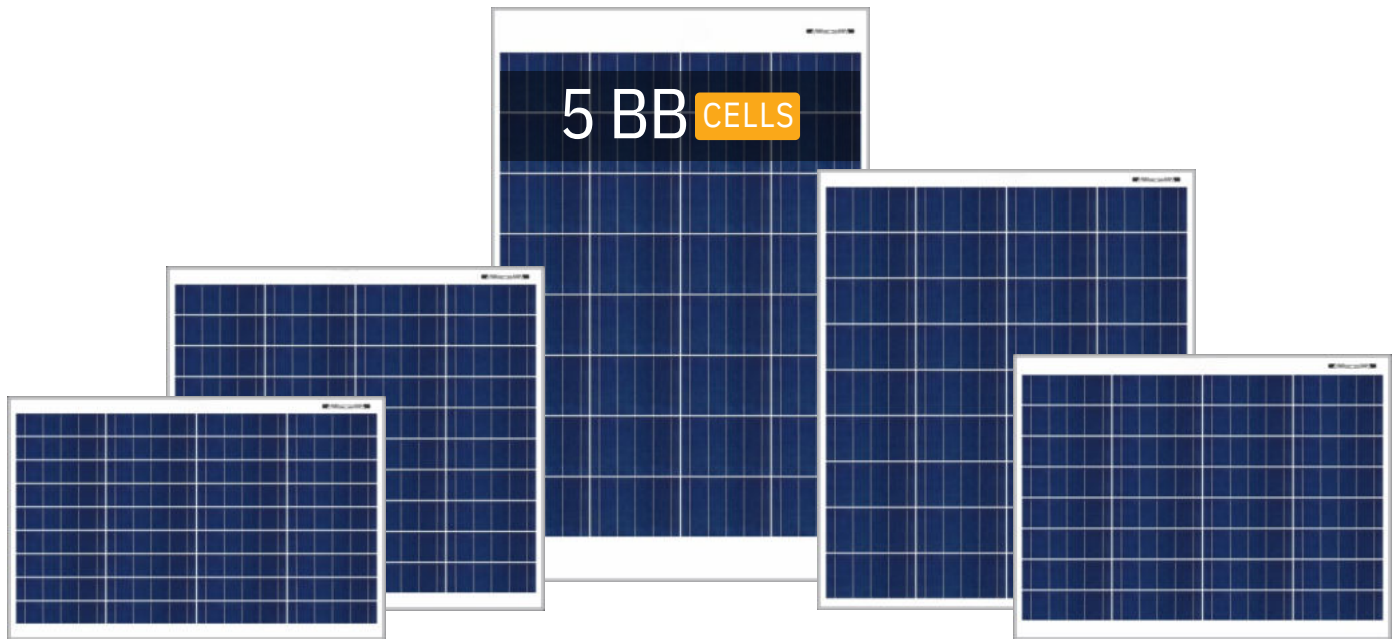
**36**  
Cells

Polycrystalline Solar PV Modules 40-100 W



**SKY LIVE ENERGY**

Everyday is **SUN DAY**



Increased module power output.



Maximum system voltage of 600 V DC.



High area efficiency.

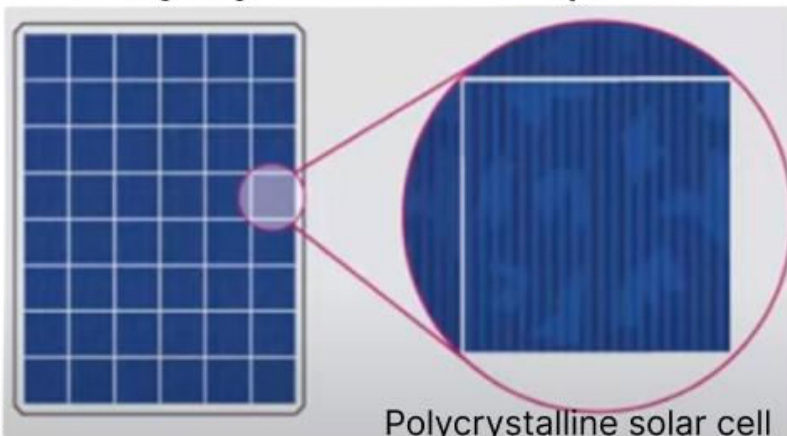


Reduced BOS cost.



Easy installation & handling for various application.

## Polycrystalline solar panel



Polycrystalline solar cell

### More Reliable Products

- | PID Resistant 5BB cells and encapsulants.
- | Salt mist & ammonia resistant.
- | AR Coated tempered PV grade glass.
- | Only positive power tolerance.
- | Excellent low light performance.
- | Certified to withstand harsh environmental conditions.
- | 100% EL Inspected to ensure micro crack free modules.

## Applications



On-grid Large scale utility projects



On-grid rooftop Industrial & commercial system



Off-grid rooftop systems for residential buildings



Solar water pumping systems



Off-grid systems for Filling Stations



Electric Vehicles charging station



Street lighting applications

Website : [www.skyliveenergy.com](http://www.skyliveenergy.com)

Email : [export@skyliveenergy.com](mailto:export@skyliveenergy.com)

# TECHNICAL DATA

Module Series	BBS12C40	BBS12C50	BBS12C60	BBS12C75	BBS12C80	BBS12C100
<b>Electrical Characteristics at STC:</b>						
Maximum Power Pmax (Wp)	40.00	50.00	60.00	75.00	80.00	100.00
Maximum Voltage Vmpp (V)	18.50	18.50	18.50	18.50	18.50	18.50
Maximum Current Impp (A)	2.16	2.70	3.24	4.05	4.32	5.41
Open Circuit Voltage Voc (V)	22.00	22.00	22.00	22.00	22.00	22.00
Short Circuit Current Isc (A)	2.31	2.85	3.39	4.20	4.47	5.56
Module Efficiency (%)	14.00	14.10	14.25	14.40	14.50	15.25

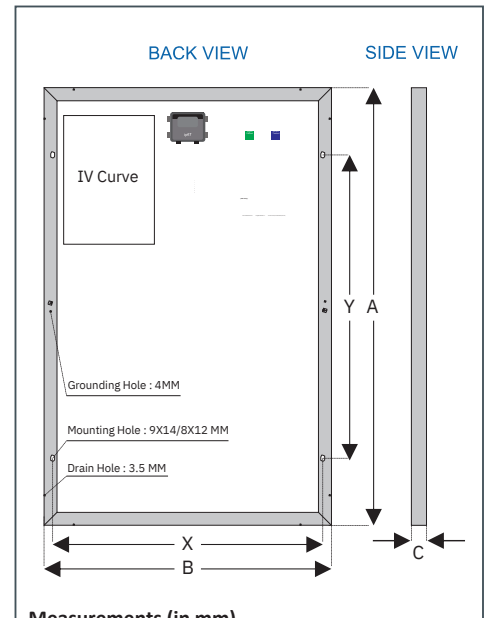
STC:1000W/m2 irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3  
Average relative efficiency reduction of <5% for every 200W/m2 reduction in Irradiance, according to EN 60904-1

<b>Electrical Characteristics at NOCT:</b>						
Maximum Power Pmax (Wp)	28.70	35.80	42.96	51.50	55.20	72.00
Maximum Voltage Vmpp (V)	16.41	16.41	16.41	16.41	16.41	16.41
Maximum Current Impp (A)	1.75	2.18	2.61	3.15	3.29	4.39
Open Circuit Voltage Voc (V)	19.93	19.93	19.93	19.93	19.93	19.93
Short Circuit Current Isc (A)	1.98	2.39	3.10	3.30	3.55	4.81

NOCT:800W/m2 irradiance, 20°C ambient temperature, Wind Speed 1m/sec

<b>Temperature coefficient (Tc) and permissible operating conditions</b>	
Tc of Open Circuit Voltage ( $\beta$ )	-0.31%/°K
Tc of Short Circuit Current ( $\alpha$ )	0.05%/°K
Tc of Power ( $\gamma$ )	-0.41%/°K
NOCT	46 ± 2°C
Maximum series fuse ratings	10A
Temperature Range	-40°C to +85°C
Maximum System Voltage	600/1000 V DC

<b>Mechanical Data</b>	
Solar Cells	36 Polycrystalline Solar cut cells, 5BB
Junction Box	IP 67 rated with 2 bypass diodes
Substrate	3.2 mm high transmission low iron tempered glass (AR coated)
Cell Encapsulant	PID Free EVA (Ethylene Vinyl Acetate) - FC/UFC
Backsheet	Composite Film - White (Black & Transparent optional)**
Frame	Silver Anodized Aluminum frame with twin wall profile
Application Class	Class A (safety class II)
Mechanical Load Test	Sustain heavy static load (2400 Pa & 5400 Pa or 550 kg/m2)



<b>Measurements (in mm)</b>						
	40 W	50 W	60 W	75W	80 W	100 W
Length (A)	430	505	605	775	775	1010
Width (B)	665	665	665	665	665	665
Height (C)	30	30	30	30	30	30
Y-Pitch (Y)	290	365	400	400	400	700
X-Pitch (X)	635	635	635	635	635	635
Weight	4.5 Kg	5.5 Kg	6.2 Kg	6.8 Kg	6.8 Kg	8.5 Kg



**BUY "SOLAR PANEL" TODAY**  
Save Energy for "Tomorrow"



Premium Quality

# Solar PV Modules

**36**  
Cells

Polycrystalline Solar PV Modules 150-170 W  
Mono PERC Solar PV Modules 180-200 W



**SKY LIVE ENERGY**

Everyday is **SUN DAY**



Increased module power output.



Maximum system voltage of 1000 V DC.



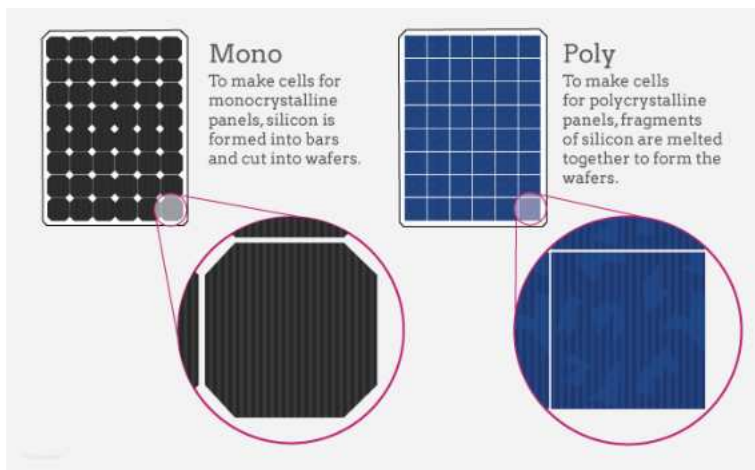
Reduced BOS cost.



High area efficiency.



Easy installation & handling for various application.



## More Reliable Products

- PID Resistant 5BB cells and encapsulants.
- Salt mist & ammonia resistant.
- AR Coated tempered PV grade glass.
- Only positive power tolerance.
- Excellent low light performance.
- Certified to withstand harsh environmental conditions.
- 100% EL Inspected to ensure micro crack free modules.

## Applications



On-grid Large scale utility projects



On-grid rooftop Industrial & commercial system



Off-grid rooftop systems for residential buildings



Solar water pumping systems



Off-grid systems for Filling Stations



Electric Vehicles charging station



Street lighting applications



# TECHNICAL DATA

Module Series	POLYCRYSTALLINE			MONOCRYSTALLINE-PERC		
	BBS12F150	BBS12F165	BBS12F170	BBS12MF180	BBS12MF185	BBS12MF 200
<b>Electrical Characteristics at STC:</b>						
Maximum Power Pmax (Wp)	150.00	165.00	170.00	180.00	185.00	200.00
Maximum Voltage Vmpp (V)	17.98	18.18	18.24	20.30	20.34	23.56
Maximum Current Imp (A)	8.32	9.08	9.32	8.87	9.10	8.49
Open Circuit Voltage Voc (V)	21.18	21.38	21.47	23.83	24.08	27.76
Short Circuit Current Isc (A)	8.84	9.62	9.87	9.17	9.64	9.00
Module Efficiency (%)	15.00	15.20	15.40	18.30	18.50	18.70

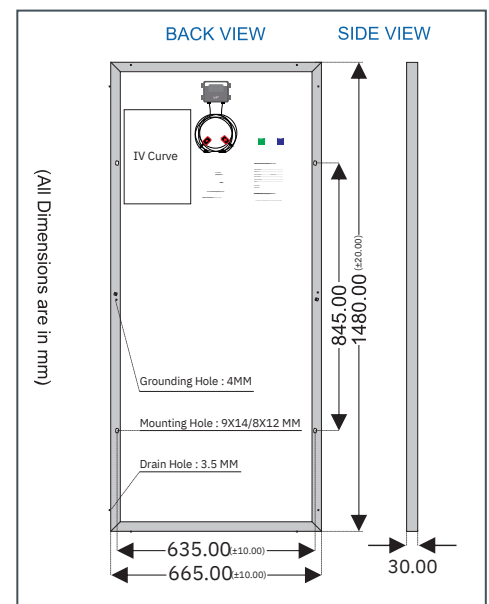
STC:1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3  
Average relative efficiency reduction of 5% for every 200W/m<sup>2</sup> reduction in Irradiance, according to EN 60904-1

<b>Electrical Characteristics at NOCT:</b>						
Maximum Power Pmax (Wp)	108.00	121.00	125.00	130.00	133.50	144.43
Maximum Voltage Vmpp (V)	16.20	16.90	17.17	17.42	17.74	20.22
Maximum Current Imp (A)	6.70	7.16	7.28	7.45	7.53	7.14
Open Circuit Voltage Voc (V)	20.20	20.53	20.68	20.89	21.10	24.26
Short Circuit Current Isc (A)	6.90	7.40	7.52	7.83	8.10	7.50

NOCT:800W/m<sup>2</sup> irradiance, 20°C ambient temperature, Wind Speed 1m/sec

<b>Temperature coefficient (Tc) and permissible operating conditions</b>		
Tc of Open Circuit Voltage (β)	-0.310%/°K	-0.300%/°K
Tc of Short Circuit Current (α)	0.050%/°K	0.060%/°K
Tc of Power (γ)	-0.410%/°K	-0.370%/°K
NOCT	46 ± 2°C	46 ± 2°C
Maximum series fuse ratings	15A	15A
Temperature Range	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	1000 V DC	1000 V DC

<b>Mechanical Data</b>	
Dimension (LxWxH)	1480mm x 665mm x 30mm (± 10mm)
Solar Cells	32(8x4) / 36(9x4) Polycrystalline Solar cells, 5BB, (157 x 157mm)
(PID Free)	36(9x4) Mono PERC Solar cells, 5BB, (157 x 157mm / 159x159mm)
Weight	11.6 Kg
Junction on Box	IP 67 rated with 2 bypass diodes
Substrate	3.2 mm high transmission low iron tempered glass (AR coated)
Cell Encapsulant	PID Free EVA (Ethylene Vinyl Acetate) - FC/UFC
Backsheet	Composite Film - White (Black & Transparent optional)**
Frame	Silver Anodized Aluminum frame with twin wall profile
Application Class	Class A (safety class II)
Mechanical Load Test	Sustain heavy static load (2400 Pa & 5400 Pa or 550 kg/m <sup>2</sup> )



Premium Quality

# Solar PV Modules

**60**  
Cells

Polycrystalline Solar PV Modules 250-280 W  
Mono PERC Solar PV Modules 310-330 W



Increased module power output.



Maximum system voltage of 1500 V DC.



Reduced BOS cost.



High area efficiency.



Easy installation & handling for various application.



## More Reliable Products

- | PID Resistant 5BB cells and encapsulants.
- | Salt mist & ammonia resistant.
- | AR Coated tempered PV grade glass.
- | Only positive power tolerance.
- | Excellent low light performance.
- | Certified to withstand harsh environmental conditions.
- | 100% EL Inspected to ensure micro crack free modules.

## Applications



On-grid Large scale utility projects



On-grid rooftop Industrial & commercial system



Off-grid rooftop systems for residential buildings



Solar water pumping systems



Off-grid systems for Filling Stations



Electric Vehicles charging station



Street lighting applications



# TECHNICAL DATA

Module Series	POLYCRYSTALLINE				MONOCRYSTALLINE-PERC		
	BBS24F250	BBS24F270	BBS24F275	BBS24F280	BBS24MF310	BBS24MF320	BBS24MF330
<b>Electrical Characteristics at STC:</b>							
Maximum Power Pmax (Wp)	250.00	270.00	275.00	280.00	310.00	320.00	330.00
Maximum Voltage Vmpp (V)	27.22	30.40	30.46	30.51	32.60	33.17	38.45
Maximum Current Imp (A)	9.19	8.88	9.03	9.18	9.51	9.65	8.58
Open Circuit Voltage Voc (V)	32.02	35.80	35.86	35.91	40.30	40.78	46.01
Short Circuit Current Isc (A)	9.74	9.41	9.57	9.73	10.04	10.18	9.44
Module Efficiency (%)	16.30	16.65	17.00	17.25	18.80	19.40	20.50

STC:1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3  
Average relative efficiency reduction of <5% for every 200W/m<sup>2</sup> reduction in Irradiance, according to EN 60904-1

<b>Electrical Characteristics at NOCT:</b>							
Maximum Power Pmax (Wp)	185.97	195.90	199.20	203.00	224.30	237.00	244.00
Maximum Voltage Vmpp (V)	27.72	28.51	28.71	29.00	33.88	31.32	31.96
Maximum Current Imp (A)	6.71	6.87	6.94	7.10	6.62	7.56	7.64
Open Circuit Voltage Voc (V)	35.08	35.17	35.48	35.71	41.65	38.56	39.16
Short Circuit Current Isc (A)	7.04	7.16	7.21	7.29	7.02	8.01	8.24

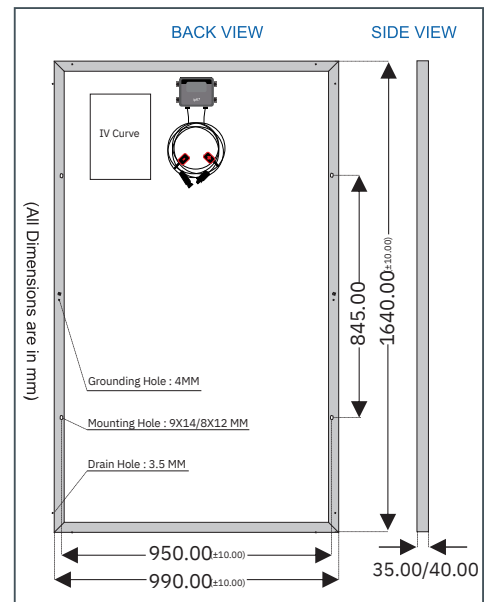
NOCT:800W/m<sup>2</sup> irradiance, 20°C ambient temperature, Wind Speed 1m/sec

### Temperature coefficient (Tc) and permissible operating conditions

Tc of Open Circuit Voltage (β)	-0.310%/°K	-0.300%/°K
Tc of Short Circuit Current (α)	0.050%/°K	0.060%/°K
Tc of Power (γ)	-0.410%/°K	-0.370%/°K
NOCT	46 ± 2°C	46 ± 2°C
Maximum series fuse ratings	30A	30A
Temperature Range	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	1000/1500 V DC	1000/1500 V DC

### Mechanical Data

Dimension (LxWxH)	1640mm x 990mm x 35/40mm (± 10mm)
Solar Cells	Poly 54(9x6) / 60(10x6) Polycrystalline Solar cells, 5BB, (157 x 157mm) Mono 60(10x6) Mono PERC Solar cells, 5BB, (157 x 157mm / 159x159mm)
Weight	18.5 Kg
Junc on Box	IP 67 rated with 3 bypass diodes
Cables & Connectors	4 sq. m solar cable 1000mm, 2 Nos. black MC4 connectors
Superstrate	3.2 mm high transmission low iron tempered glass (AR coated/Non coated)
Cell Encapsulant	PID Free EVA (Ethylene Vinyl Acetate) - FC/UFC
Backsheet	Composite Film - White (Black & Transparent optional)**
Frame	Silver Anodized Aluminum frame with twin wall profile
Application Class	Class A (safety class II)
Mechanical Load Test	Sustain heavy static load (2400 Pa & 5400 Pa or 550 kg/m <sup>2</sup> )



Premium Quality

# Solar PV Modules






**72**  
Cells

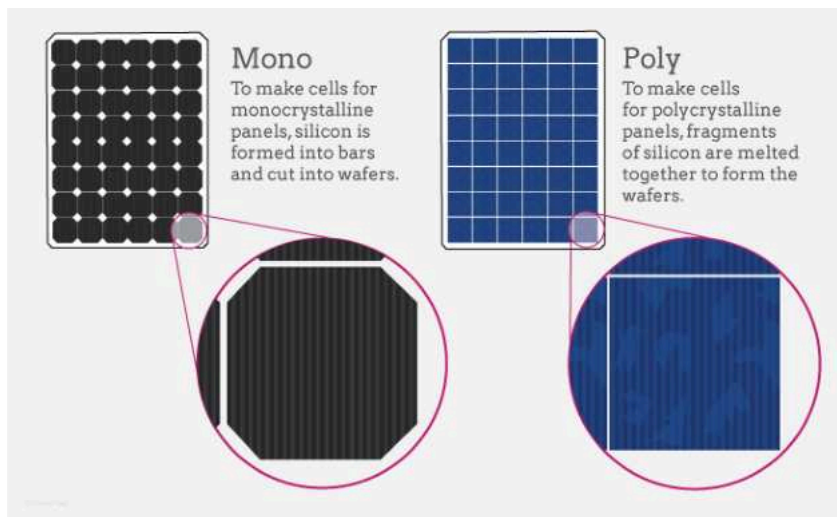
Polycrystalline Solar PV Modules 300-340 W  
Mono PERC Solar PV Modules 375-400 W



**SKY LIVE ENERGY**  
Everyday is **SUN DAY**



-  Increased module power output.
-  Maximum system voltage of 1500 V DC.
-  Reduced BOS cost.
-  High area efficiency.
-  Easy installation & handling for various application.



## More Reliable Products

- ✓ PID Resistant 5BB cells and encapsulants.
- ✓ Salt mist & ammonia resistant.
- ✓ AR Coated tempered PV grade glass.
- ✓ Only positive power tolerance.
- ✓ Excellent low light performance.
- ✓ Certified to withstand harsh environmental conditions.
- ✓ 100% EL Inspected to ensure micro crack free modules.

## Applications



On-grid Large scale utility projects



On-grid rooftop Industrial & commercial system



Off-grid rooftop systems for residential buildings



Solar water pumping systems



Off-grid systems for Filling Stations



Electric Vehicles charging station



Street lighting applications

Website : [www.skyliveenergy.com](http://www.skyliveenergy.com)

Email : [export@skyliveenergy.com](mailto:export@skyliveenergy.com)



# TECHNICAL DATA

Module Series	POLYCRYSTALLINE				MONOCRYSTALLINE-PERC		
	BBS24F300	BBS24F330	BBS24F335	BBS24F340	BBS24MF375	BBS24MF385	BBS24MF400
<b>Electrical Characteristics at STC:</b>							
Maximum Power Pmax (Wp)	300.00	330.00	335.00	340.00	375.00	385.00	400.00
Maximum Voltage Vmpp (V)	33.90	38.45	38.52	38.58	39.27	40.22	40.15
Maximum Current Imp (A)	8.85	8.58	8.70	8.82	9.55	9.57	9.96
Open Circuit Voltage Voc (V)	39.90	46.01	46.08	46.15	48.47	49.05	49.30
Short Circuit Current Isc (A)	9.38	9.44	9.57	9.70	10.06	10.17	10.22
Module Efficiency (%)	16.70	17.00	17.20	17.40	19.00	19.50	20.50

STC:1000W/m2 irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3  
Average relative efficiency reduction of 5% for every 200W/m<sup>2</sup> reduction in Irradiance, according to EN 60904-1

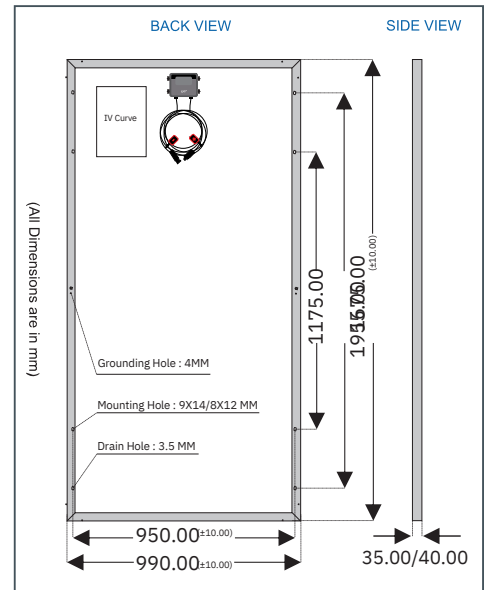
<b>Electrical Characteristics at NOCT:</b>							
Maximum Power Pmax (Wp)	223.70	245.41	249.34	252.71	282.00	285.00	296.00
Maximum Voltage Vmpp (V)	34.40	34.63	34.91	35.10	38.30	38.50	38.80
Maximum Current Imp (A)	6.56	7.09	7.14	7.20	7.36	7.40	7.63
Open Circuit Voltage Voc (V)	42.70	43.18	43.46	43.70	47.20	47.25	47.40
Short Circuit Current Isc (A)	7.10	7.35	7.47	7.60	7.82	8.03	8.10

NOCT:800W/m2 irradiance, 20°C ambient temperature, Wind Speed 1m/sec

<b>Temperature coefficient (Tc) and permissible operating conditions</b>		
Tc of Open Circuit Voltage ( $\beta$ )	-0.310%/°K	-0.300%/°K
Tc of Short Circuit Current ( $\alpha$ )	0.050%/°K	0.060%/°K
Tc of Power ( $\gamma$ )	-0.410%/°K	-0.370%/°K
NOCT	46 ± 2°C	46 ± 2°C
Maximum series fuse ratings	30A	30A
Temperature Range	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	1000/1500 V DC	1000/1500 V DC

## Mechanical Data

Dimension (LxWxH)	1955mm x 990mm x 35/40mm (± 10mm)
Solar Cells	Poly 66(11x6) / 72(12x6) Polycrystalline Solar cells, 5BB, (157 x 157mm)
(PID Free)	Mono 72(12x6) Mono PERC Solar cells, 5BB, (157 x 157mm / 159x159mm)
Weight	20.5 Kg
Junc on Box	IP 67 rated with 3 bypass diodes
Cables & Connectors	4 sq. m solar cable 1000mm, 2 Nos. black MC4 connectors
Superstrate	3.2 mm high transmission low iron tempered glass (AR coated/Non coated)
Cell Encapsulant	PID Free EVA (Ethylene Vinyl Acetate) - FC/UFC
Backsheet	Composite Film - White (Black & Transparent optional)**
Frame	Silver Anodized Aluminum frame with twin wall profile
Applica on Class	Class A (safety class II)
Mechanical Load Test	Sustain heavy sta c load (2400 Pa & 5400 Pa or 550 kg/m2)



SOLAR PANELS: HOW TO CHOOSE BETWEEN MONOCRYSTALLINE AND POLYCRYSTALLINE