





# Complete solutions for the intelligent development of fiber optic networks

Minqing Fibramerica Technology, under its trade name FIBRAMÉRICA, is one of the world's leading companies dedicated to the design, development, manufacture, distribution and marketing of advanced optical connectivity solutions. We work closely with the main players in the telecommunications market, such as operators, distributors and importers and installers all over the world, both as OEMs and under our own brand.

Its headquarters are located in Fuzhou, Fujian, China, with sales offices in Shanghai and Ningbo. It also has direct sales units in America, located in Brazil, where all commercial and technical support is provided in Spanish through its engineers and sector specialists. This expansion not only demonstrates its global vision, but also reflects its commitment to localized customer service, providing commercial and technical assistance in the same time zone and language as our customers.

On its path to excellence, FIBRAMÉRICA has adopted a continuous focus on improving processes, integrating emerging technologies and implementing effective communication strategies. Their dedication translates into competitive prices, efficient production times and comprehensive support, from the manufacturing process to product transportation.

Following the strictest international quality norms and standards, such as ISO9001, it guarantees that each of its products meets the quality and functionality expectations of the most demanding customers.

With a vision of the future, FIBRAMÉRICA focuses its efforts on developing and adapting new products, tailored to the specificities and needs of each project, from the initial design stage to final production.





# SOLAR SOLUTIONS FOR EVERY NEED: MONOFACIAL, BIFACIAL, AND FULL-BLACK PANELS

In today's renewable energy market, the choice of solar panels can greatly impact the efficiency and aesthetic appeal of an installation. Monofacial panels are a classic option that focuses on optimizing energy capture from direct sunlight on one side. With strong durability and high efficiency, they are widely used in both residential and commercial setups, delivering reliable output with a straightforward, single-sided design.

Bifacial panels, on the other hand, offer the advantage of dual-sided energy capture. By absorbing sunlight from both sides, these panels can generate more power by utilizing reflected light from the ground or nearby surfaces. This unique feature makes bifacial panels ideal for open, reflective environments, maximizing output in areas with ample ground light exposure

and increasing overall energy efficiency.

The full-black panel design combines performance with style, blending seamlessly into contemporary architectural settings. These panels are popular in residential installations, where homeowners seek not only energy savings but also a sleek, unobtrusive look. Full-black panels enhance the visual appeal of a property while offering robust energy production, making them a preferred choice for rooftops.

Each of these solar panel options provides distinct advantages, tailored to meet specific installation needs and environmental conditions. With advanced engineering and a focus on both function and form, these panels represent a versatile solution for today's solar energy demands.



# 420~440W

#### **Features**

- Module Efficiency up to 22.5%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.

Module weight

• More energy yield, lower BOS and LCOE.



# 480~500W

#### **Features**

- Module Efficiency up to 22.5%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.

  Non-destructive specificient ( 0.20%/95) Investors and the second specific specifi
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters	
Max. system voltage (IEC)	1500V DC
Number of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	25A
Operational temperature	-40~+85°C

Mechanical Parameters	
Outer dimensions (L x W x H)	1722×1134×30mm
Cell	N type mono-crystalline
Number of cells	108 (6*18)
Frame type	Aluminum, silver anodized
Glass thickness	3.2mm
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length
Cable diameter (IEC)	4mm² / 12 AWG
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)

21.3kg

Operating Parameters	
Max. system voltage (IEC)	1500V DC
Number of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	30A
Operational temperature	-40~+85°C

Mechanical Parameters	
Outer dimensions (L x W x H)	1962×1134×30mm
Cell	N type mono-crystalline
Number of cells	108 (6*18)
Frame type	Aluminum, silver anodized
Glass thickness	3.2mm
Cable length (including connector)	Portrait: ( + )300mm,( - )300mm; Customized length
Cable diameter (IEC)	4mm² / 12 AWG
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)
Module weight	24.1kg

# 570~590W

#### **Features**

- Module Efficiency up to 22.8%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



# 595~615W

#### **Features**

- Module Efficiency up to 22.8%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters	
Max. system voltage (IEC)	1500V DC
Number of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	25A
Operational temperature	-40~+85°C

Mechanical Parameters	
Outer dimensions (L x W x H)	2278×1134×30mm
Cell	N type mono-crystalline
Number of cells	144 (6*24)
Frame type	Aluminum, silver anodized
Glass thickness	3.2mm
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length
Cable diameter (IEC)	4mm² / 12 AWG
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)
Module weight	27.2kg

Operating Parameters	
Max. system voltage (IEC)	1500V DC
Number of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	30A
Operational temperature	-40~+85°C

Mechanical Parameters	
Outer dimensions (L x W x H)	2382×1134×30mm
Cell	N type mono-crystalline
Number of cells	132 (6*22)
Frame type	Aluminum, silver anodized
Glass thickness	3.2mm
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length
Cable diameter (IEC)	4mm² / 12 AWG
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)
Module weight	28.8kg

<sup>(1)</sup> Please refer to the installation manual or contact us to confirm. The maximum test mechanical load = 1.5× maximum design mechanical load.

# 625~645W

#### **Features**

- Module Efficiency up to 22.8%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.

Module weight

• More energy yield, lower BOS and LCOE.



## 690~710W

#### **Features**

- Module Efficiency up to 22.9%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters	
Max. system voltage (IEC)	1500V DC
Number of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	30A
Operational temperature	-40~+85°C

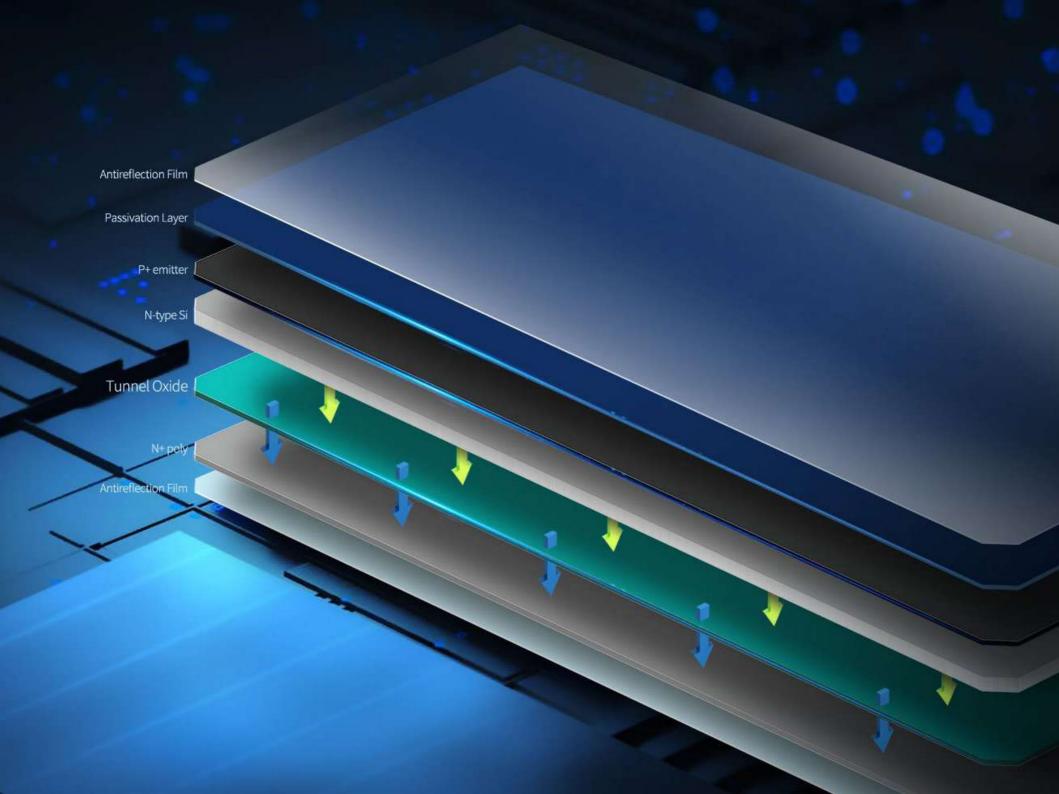
Mechanical Parameters	
Outer dimensions (L x W x H)	2172×1303×33mm
Cell	N type mono-crystalline
Number of cells	120 (6*20)
Frame type	Aluminum, silver anodized
Glass thickness	3.2mm
Cable length (including connector)	Portrait: ( + )300mm,( - )300mm; Customized length
Cable diameter (IEC)	4mm² / 12 AWG
(1)Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)

30.6kg

Operating Parameters	
Max. system voltage (IEC)	1500V DC
Number of diodes	3
Junction box IP rating	IP 68
Max. series fuse rating	30A
Operational temperature	-40~+85°C

Mechanical Parameters	
Outer dimensions (L x W x H)	2384×1303×33mm
Cell	N type mono-crystalline
Number of cells	132 (6*22)
Frame type	Aluminum, silver anodized
Glass thickness	3.2mm
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length
Cable diameter (IEC)	4mm² / 12 AWG
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)
Module weight	33.3kg

 $<sup>(1)</sup> Please refer to the installation manual or contact us to confirm. The maximum test mechanical load = 1.5 \times maximum design mechanical load.$ 



# Bifacial Series FAB-445W-TOP-BS

# 425~445W

#### Features

- Module Efficiency up to 22.8%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



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Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	1722×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	108 (6*18)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	23.7kg	

 $(1) Please refer to the installation manual or contact us to confirm. The maximum test mechanical load = 1.5 \times maximum design mechanical load.$ 

# Bifacial Series FAB-500W-TOP-BS

# 480~500W

#### Features

- Module Efficiency up to 22.5%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	1962×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	108 (6*18)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	27.4kg	

## 535~555W

#### **Features**

- Module Efficiency up to 22.5%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



## 575~595W

#### **Features**

- Module Efficiency up to 23%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	35A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	2172×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	120 (6*20)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: ( + )300mm,( - )300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	30.7kg	

(1) Please refer to the installation manual or contact us to confirm. The	ne maximum test mechanical load =	1.5× maximum design mechanical load.
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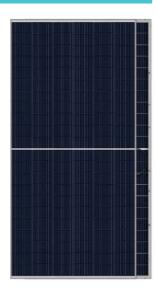
Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	2278×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	144 (6*24)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: ( + )300mm,( - )300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	32.1kg	

 $<sup>(1)</sup> Please \ refer \ to \ the installation \ manual \ or \ contact \ us \ to \ confirm. The \ maximum \ test \ mechanical \ load = 1.5 \times maximum \ design \ mechanical \ load.$ 

# 590~610W

#### **Features**

- Module Efficiency up to 22,6%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



# 620~640W

#### **Features**

- Module Efficiency up to 22,6%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	2382×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	132 (6*22)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	33.7kg	

Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	2172×1303×33mm	
Cell	N type mono-crystalline	
Number of cells	120 (6*20)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	34.9kg	

# 625~645W

#### **Features**

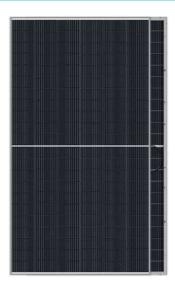
- Module Efficiency up to 23.1%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



# 685~705W

#### **Features**

- Module Efficiency up to 22.7%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	2465×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	156 (6*26)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: ( + )300mm,( - )300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	34.7kg	

Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	35A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	2384×1303×33mm	
Cell	N type mono-crystalline	
Number of cells	132 (6*22)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0mm	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) / 2400Pa (rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	38.3kg	



# Bifacial FAB-440W-TOP-BS-FB

## 420~440W

#### **Features**

- Module Efficiency up to 22.5%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



## 420~440W

#### **Features**

- Module Efficiency up to 22.0%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	25A	
Operational temperature	-40~+85°C	

Mechanical Parameters		
Outer dimensions (L x W x H)	1722×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	108 (6*18)	
Frame type	Aluminum, silver anodized	
Glass thickness	3.2 mm	
Cable length (including connector)	Portrait: ( + )300mm,( - )300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
(1) Maximum test mechanical load	5400Pa (front) /2400Pa(rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	21.3kg	

(1) Please refer to the installation manual or contact us to confirm. The maximum test mechanical load = 1.5× maximum design mechanical load.

Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	1762×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	96 (6*16)	
Frame type	Aluminum, silver anodized	
Glass thickness	1.6+1.6 mm (rear glass glazed in black	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	4800Pa (front) /2400Pa(rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	21.0kg	

# Bifacial FAB-440W-TOP-BS-FB

# 425~445W

#### **Features**

- Module Efficiency up to 22.8%.
- Zero LID.
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability.
- Non-destructive Slicing Tech, reduce micro-crack risk.
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation.
- Excellent low irradiance performance, higher power output.
- Bifaciality rate up to 80-85%, and up to 30% power-gain from back side (depending on albedo).
- Resistant to harsh environments.
- Anti PID.
- More energy yield, lower BOS and LCOE.



Operating Parameters		
Max. system voltage (IEC)	1500V DC	
Number of diodes	3	
Junction box IP rating	IP 68	
Max. series fuse rating	30A	
Operational temperature	-40~+85°C	
Bifaciality rate	80±5%	
Mechanical Parameters		
Outer dimensions (L x W x H)	1722×1134×30mm	
Cell	N type mono-crystalline	
Number of cells	108 (6*18)	
Frame type	Aluminum, silver anodized	
Glass thickness	2.0+2.0 mm (rear glass glazed in black)	
Cable length (including connector)	Portrait: (+)300mm,(-)300mm; Customized length	
Cable diameter (IEC)	4mm² / 12 AWG	
<sup>(1)</sup> Maximum test mechanical load	5400Pa (front) /2400Pa(rear)	
Connector type (IEC)	PV-HYC11xyz (standard)/MC4 EVO2 (optional)	
Module weight	23.7kg	





