

# SF-M18/156

## 625-640W

### 182±1.5×91±1.5mm

### Cells 156

### Monocrystalline

### N-TYPE Half-Cell Module

Max Power Out: 640W

Max Efficiency: 22.90%

Power Tolerance: 0~+5W



#### SMBB Technology

Better light trapping and current collection to improve module power output and reliability



#### PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



#### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



#### Reduced Hot Spot Loss

Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.



#### Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

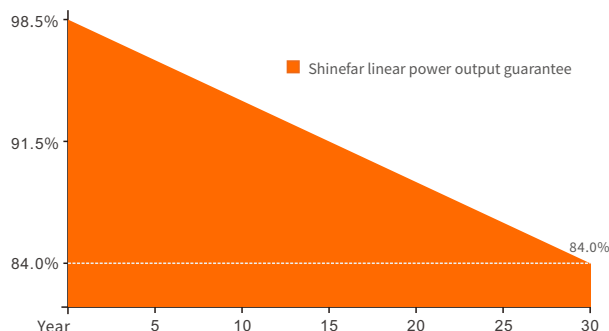


#### High Energy Generation, Low LCOE

Low Pmax temp coefficient increases energy production

### Superior Warranty

- 15-year material & technology warranty
- 30-year linear power output warranty

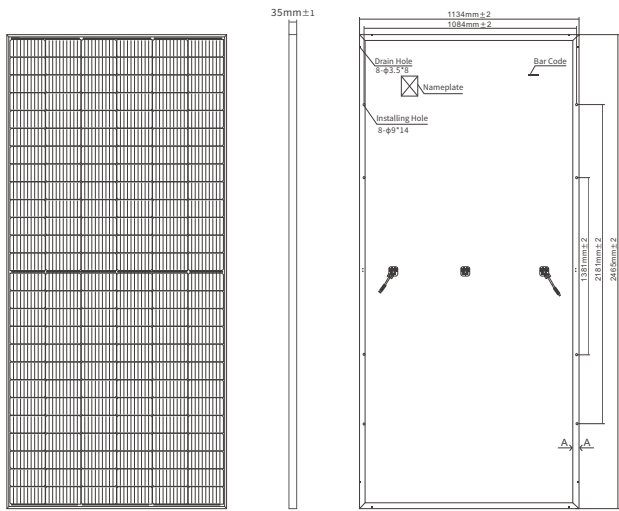


### Comprehensive Products and System Certificates

- IEC/EN61215-1:2021 & IEC/EN61215-2:2021
- IEC/EN61730-1:2016 & IEC/EN61730-2:2016
- UL61730-1:2017 & UL61730-2:2017
- UL61215-1:2017 & UL61215-2:2017
- IEC 61701:2020-Saltmist
- IEC 62716:2013-Ammonia
- IEC 62804:2020-PID
- IECCE Certificate Body (CB)
- UKCA:EN61730-2018
- ISO9001 & ISO14001 & ISO45001



## Engineering Drawings



Front

Side

Back

## Structural Parameter

Dimensions of Module	2465 × 1134 × 35mm
Weight	28.8kg
Packing	31PCS/Pallet, 620PCS/40HQ
Glass	High Transparency Solar Glass 3.2mm
Backsheet	White
Frame	Anodized Aluminum Alloy & Custom Color Accepted
J-Box	IP68 Rated
Cable	4.0mm <sup>2</sup> , 300mm
Bypass Diodes	3PCS
Wind/ Snow Load	2400Pa/5400Pa
Connector	MC4 Compatible

## Electrical Specification

(STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5G — NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind speed 1m/s)

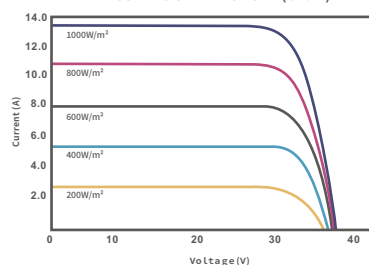
Module Type	SF-M18/156625		SF-M18/156630		SF-M18/156635		SF-M18/156640	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax) [W]	625	468.13	630	471.87	635	475.62	640	479.36
Maximum Power Voltage (Vmp) [V]	46.06	43.12	46.21	43.26	46.36	43.40	46.51	43.54
Maximum Power Current (Imp) [A]	13.57	10.86	13.63	10.91	13.70	10.96	13.76	11.01
Open Circuit Voltage (Voc) [V]	55.06	50.78	55.21	50.93	55.36	51.07	55.51	51.21
Short Circuit Current (Isc) [A]	14.22	11.55	14.27	11.58	14.31	11.62	14.35	11.65
Module Efficiency [%]	22.36		22.54		22.72		22.90	
Cell Type [mm]	Mono 182 ± 1.5 × 91 ± 1.5, 156 Cells							
Operational Temperature [°C]	-40 ~ +85°C							
Maximum System Voltage	1500V DC							
Max Series Fuse Rating	25A							

## Temperature Ratings

Nominal Operating Cell Temperature	45 ± 2°C
Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.23%/°C
Temperature Coefficient of Pmax	-0.30%/°C

## Curve Diagram

I-V CURVES OF PV MODULE (640W)



P-V CURVES OF PV MODULE (640W)

