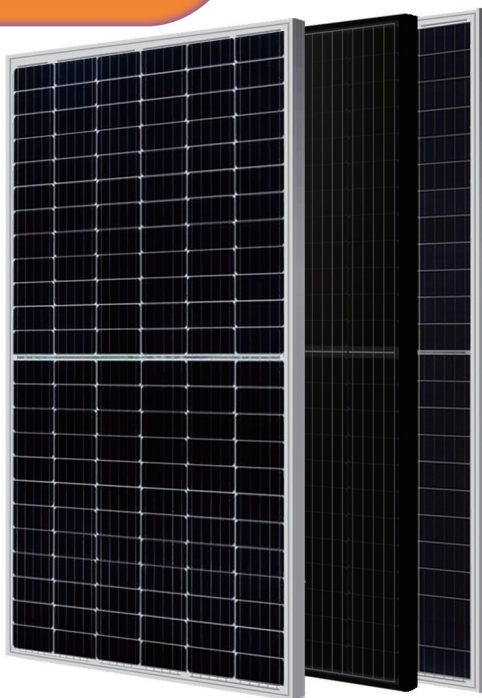


SF-M15/144

158.75mm half-cut 5bb/9bb
Monocrystalline Module

390-420W



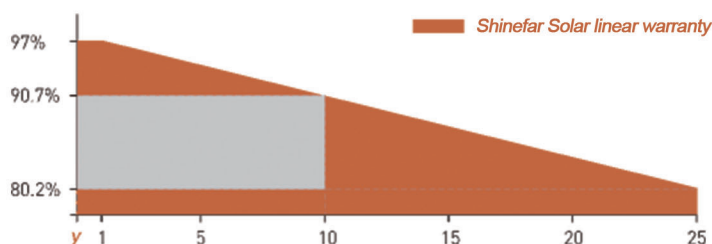
420W
Max Power Output

20.77%
Max Module Efficiency

0~+5w
Power Output Guarantee

-  High conversion efficiency due to top quality wafers and advanced cell technology, Ideal choice for large scale ground installation
-  Through sand, salt fog, ammonia and other weather resistance test, adapt to harsh outdoor environment
-  Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail trails free
-  Enhanced frame design, more excellent component load capacity
-  Highly transparent self cleaning glass brings additional yield and easy maintenance

Shinefar Solar is one of leading global manufacturers of solar modules and solar systems. Our solar modules production capacity reaches 1.2GW and we have our own fully automated production line which ensures the quality is strict and stable. We can produce market mainstream solar modules, including large size, MBB, high efficient single glass and double glass modules, both mono and poly, full cells and half cut cells. All our modules have TUV, CE, SGS, INMETRO, CQC, ISO9001, ISO14001 and OHSAS18001 Certifications. Our solar modules have been exported to Europe, Vietnam, Brazil, Morocco and Many other markets since the year of 2005.



- 10-year limited product warranty (materials and labour)
- 25-year limited power warranty
10-year at 90.7% power output
25-year at 80.2% power output



(STC*) Especificação Elétrica

Máxima Potência	Pmax (W)	390	395	400	405	410	415	420
Máxima Tensão de potência	Vmp (V)	39.92	40.27	40.61	40.96	41.31	41.66	42.01
Máxima Corrente de energia	Imp (A)	9.77	9.81	9.85	9.89	9.92	10.05	10.08
Tensão do circuito aberto	Voc (V)	48.33	48.63	48.93	49.23	49.53	49.83	51.12
Corrente de curto circuito	Isc (A)	10.29	10.33	10.36	10.39	10.42	10.45	10.48
Eficiência do módulo	(%)	19.29	19.53	19.78	20.03	20.28	20.52	20.77
Dimensões do Módulo L*W*H	(mm)	2018x1002x30						
Peso	(kg)	22.6						
Tipo de célula solar	(mm)	Mono PERC 79.38x158.75, 144 cells						
Empacotamento	(pcs)	37/pallet, 924/40hq						
Tolerância à saída de energia	(W)	0 ~ +5						
Temperatura Operacional		-40~+85°C						
Máxima Tensão do sistema		1500V DC						
Máxima Classificação de fusível da série		20A						

* Irradiação 1000W/m², Temperatura do Módulo 25°C, Massa de Ar 1.5

(NOCT*) Especificação Elétrica

Máxima Potência	Pmax (W)	283.48	287.21	290.94	301.37	304.34	307.31	309.65
Máxima Tensão de potência	Vmp (V)	36.60	36.90	37.20	38.10	38.40	38.70	39.00
Máxima Corrente de energia	Imp (A)	7.77	7.80	7.84	7.91	7.93	7.94	7.95
Tensão do circuito aberto	Voc (V)	44.50	44.80	45.00	45.80	46.00	46.20	46.40
Corrente de curto circuito	Isc (A)	8.26	8.29	8.32	8.40	8.42	8.44	8.46

* Irradiação 800W/m², Temperatura Ambiente 20°C, Velocidade do Vento 1m/s

Dados Mecânicos

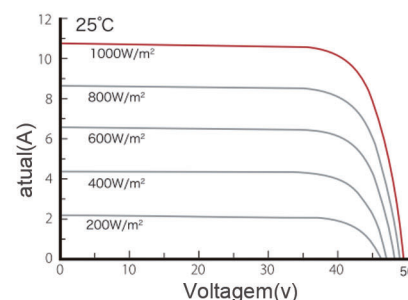
Vidro	Vidro solar de alta transparência de 3,2 mm
Planilha	Branco ou preto
Moldura	Prata/preto anodizado alu alloy
J-Box	Classificação IP68
Cabo	4mm² (0,006 polegadas²), 300 mm (1,18 polegadas)
Número de diodos	3
Carga de Vento/Neve	2400Pa/5400Pa*
conector	Compatível com MC4

* Para obter mais detalhes, consulte o manual de instalação do SF

Classificações de temperatura

(NOCT) Temperatura nominal da célula operacional	45±2°C
(Isc) Coeficiente de temperatura do ISC	+ 0.06%/°C
(Voc) Coeficiente de Temperatura de Voc	- 0.30%/°C
(Pmax) Coeficiente de Temperatura de Pmax	- 0.37%/°C

Tensão corrente(420W)



Tensão de energia(420W)

