



CIPRO-TM9C54M

470 - 500W

Dual Glass
Full Black

- Partial Shading Optimisation
- Better Temperature Coefficient
- High Temperature Restriction
- Micro-crack Resistance
- More Aesthetic Values
- Excellent Anti-LID & Anti-PID Performance

15

15-year Warranty for Materials and Processing

30

30-year Warranty for ExtraLinear Power Output

IEC 61215 / IEC 61730

ISO 9001: 2015 Quality Management System

ISO 14001: 2015 Environment Management System

ISO 45001: 2018 Occupational Health and Safety Management Systems



500W

Output

24.5%

Efficiency

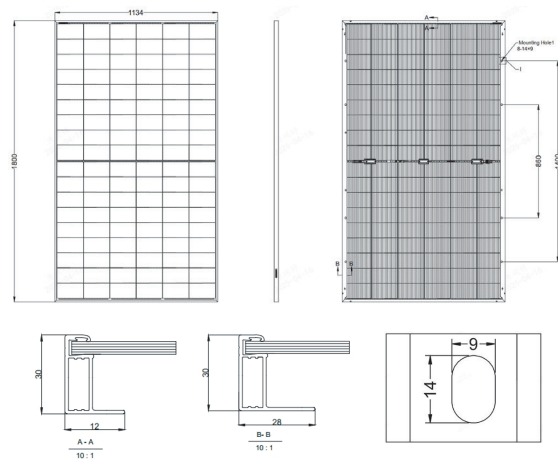
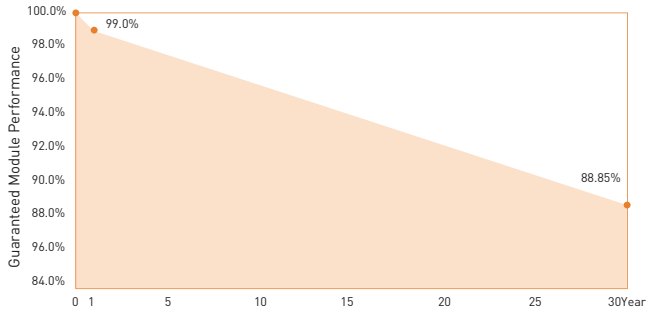
≤ 1%

First-year Degradation

≤ 0.35%

Annual Degradation from Year 2-30

30 - year Linear Performance Warranty



Tolerance

L: ±2mm

W: ±2mm

Unit: mm

Electrical Characteristics(STC: AM1.5 1000W/m² 25 °C NOCT: AM1.5 800W/m² 20 °C 1m/s)

Power Tolerance: 0~+3%

Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	470	357	475	361	480	364	485	368	490	372	495	375	500	379
V _{ov} [V]	40.50	38.42	40.63	38.55	40.76	38.67	40.89	38.80	41.02	38.92	41.15	39.04	41.28	39.16
V _{mp} [V]	33.64	31.92	33.74	32.01	33.84	31.11	33.94	32.20	34.04	32.30	34.14	32.40	34.24	32.49
I _{sc} [A]	14.82	11.97	14.89	12.03	14.96	12.09	15.03	12.15	15.10	12.21	15.17	12.26	15.24	12.32
I _{mp} [A]	13.98	11.17	14.09	11.27	14.19	11.35	14.30	11.44	14.40	11.51	14.50	11.59	14.60	11.67
Module Efficiency	23.0%		23.3%		23.5%		23.8%		24.0%		24.3%		24.5%	

Product Specification

Cell Type	N-Type TBC
Glass	Dual glass, 1.6 + 1.6mm coated semi tempered glass
Frame	Black anodized aluminum
Cable	TüV 1×4mm , (+)300mm, (-)200mm or Customized Length
No. of Cells	108 (6×18)
Junction Box	IP68, 3 bypass diodes
Connector	MC4 Compatible/MC4-Evo2
Weight	20.8 kg (45.86 lbs)
Dimension	1800×1134×30mm
Package Detail	37 pcs per pallet/222 pcs per 20' GP 888 pcs per 40' HC

Temperature Ratings (STC)

Temperature Coefficient of I _{sc}	+ 0.05%/ °C
Temperature Coefficient of V _{oc}	- 0.22%/ °C
Temperature Coefficient of P _{mx}	- 0.26%/ °C

Installation Guide

Operation Temperature	-40 °C ~ +85 °C
Maximum Series Fuse Rating	25A
Protection Class	Class II
V _{oc} and I _{sc} Tolerance	±3%
Maximum System Voltage	DC1500V
Maximum Static Loading	Front 5400Pa Back 2400Pa
Hail Test	25 mm diameter hail at 23 m/s
Fire Rating	IEC Class A

