



CIPRO-TN9C48M(F2)

200-220W

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

10

10-year Warranty for Materials and Processing

15

15-year Warranty for ExtraLinear Power Output

IEC 61215 / IEC 61730 / UL61730

ISO 9001: 2015 Quality Management System

ISO 14001: 2015 Environment Management System

ISO 45001: 2018 Occupational Health and Safety Management Systems



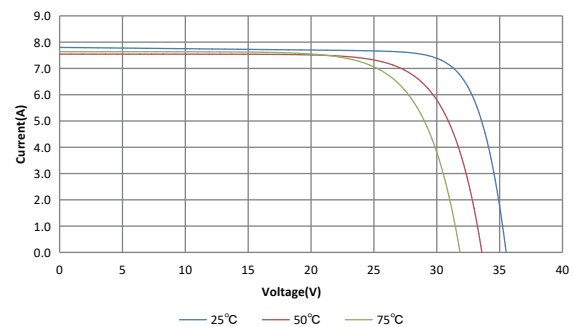
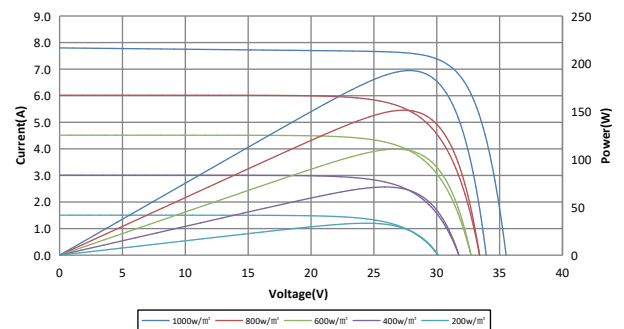
Electrical Characteristics (STC: AM1.5 1000W/m² 25 °C) (NOCT: AM1.5 800W/m² 20 °C 1m/s)

Power Tolerance:0~+3%

Test Conditions	STC		NOCT		STC		NOCT		STC		NOCT		STC		NOCT	
P _{max} [W]	200	153	205	158	210	161	215	164	220	166	225	169	230	172	235	175
V _{oc} [V]	35.33	33.40	35.38	33.50	35.42	33.50	35.47	33.50	35.52	33.60	35.57	33.60	35.62	33.60	35.67	33.60
V _{mp} [V]	31.06	28.00	31.10	28.00	31.15	28.10	31.20	28.30	31.25	28.50	31.30	28.50	31.35	28.50	31.40	28.50
I _{sc} [A]	7.45	6.00	7.55	6.08	7.65	6.16	7.72	6.22	7.80	6.28	7.87	6.34	7.94	6.40	8.01	6.46
I _{mp} [A]	6.44	5.47	6.59	5.63	6.74	5.72	6.89	5.77	7.04	5.84	7.19	5.90	7.34	5.96	7.49	6.02
Module Efficiency	21.41%		21.95%		22.48%		23.02%		23.55%		24.09%		24.62%		25.16%	

Installation Guide

Operation Temperature	-40 °C ~ +85 °C
Maximum Series Fuse Rating	15A
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 C

I-V CURVE**Temperature Ratings (STC)**

Temperature Coefficient of I _{sc}	+ 0.05%/ °C
Temperature Coefficient of V _{oc}	- 0.20%/ °C
Temperature Coefficient of P _{mx}	- 0.26%/ °C

Product Specification

Cell Type	N-Type TBC
Glass	3.2mm AR coating tempered glass
Frame	Anodized aluminum
Cable	4mm ² (IEC), 12AWG(UL) 700mm or Customized Length
No. of Cells	48 (4×12)
Junction Box	IP68, 2 bypass diodes
Connector	MC4 Compatible
Weight	11.2kg [24.69lbs]
Dimension	1213×770×30mm
Package Detail	30 pcs per pallet / 1080 pcs per 40' HC

TECHNICAL DRAWINGS