

M10多主栅单晶120片高效半片组件

M10 MBB Monocrystalline Half-cell Module (120 Half Cells)

440-460W

输出功率 / Output power

21.3%

最高效率 / Maximum efficiency

0~+5W

功率公差 / Power tolerance



全面的产品和体系证书

Comprehensive product certification and system certification

IEC TS 62941(光伏质量体系/
PV quality Management System)

ISO9001:2015(质量管理体系/
Quality Management System)

ISO14001(环境管理体系/
Environmental Management System)

OHSAS18001(职业健康安全管理体系/
Occupational Health and Safety Management System)

1 抗PID保证 / PID Resistant Guarantee

严选的封装材料免除PID风险。

Strict selection of encapsulation materials eliminates PID risk.

2 严酷环境适用性 / Severe Weather Resilience

经TUV NORD测试验证, 通过IEC 61701耐盐雾等级6、IEC62716耐氨气测试认证。

Verified by TUV NORD test, Passed IEC 61701 salt spray corrosion(grade 6), IEC62716 ammonia corrosion test certification.

3 抗热斑性能 / Hot-spot Resistance

更低的内部电流和回路功率, 有效降低热斑致热。

Lower internal current and power to effectively reduce hot-spot heating.

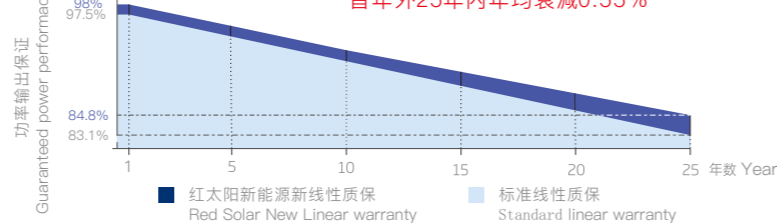
4 多主栅技术 / Multi Busbar Technology

更优的光线利用率和电流收集能力, 有效提升产品功率输出和可靠性。

Better light utilization and current collection ability, effectively improve the power output and reliability.

12年产品质保·25年线性功率保证

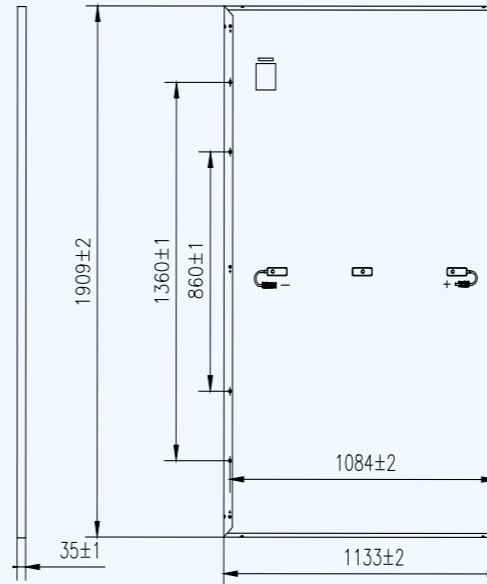
12 Year Product Warranty · 25 Year Linear Power Warranty



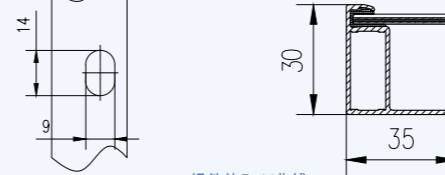
组件型号
Model of PV Module
CETC-xxxM(H)/120

功率范围
Power Range
440-460W

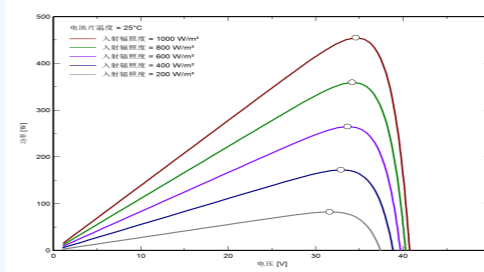
组件尺寸 (mm)
PV Module Dimension



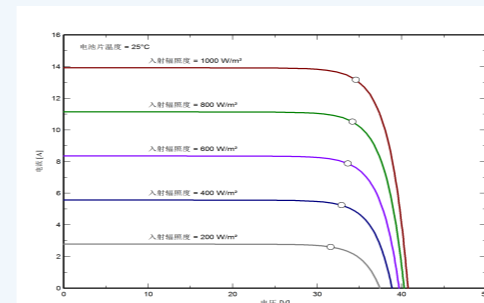
长边框截面



组件的P-V曲线
P-V Curves of PV Module



组件的I-V曲线
I-V Curves of PV Module



电气参数 (STC) / Electrical Parameter(STC)

型号/Model	440M	445M	450M	455M	460M
最大功率/Maximum power	440	445	450	455	460
工作点电压/Working point voltage	33.8	34.1	34.3	34.5	34.7
工作点电流/Working point current	12.99	13.05	13.12	13.19	13.25
开路电压/Open circuit voltage	39.97	40.3	40.5	40.7	41.0
短路电流/Short circuit current	13.72	13.78	13.85	13.92	13.98
组件效率/PV module efficiency	20.3%	20.6%	20.8%	21.0%	21.3%
标准测试条件/Standard test conditions	大气质量AM1.5, 辐照度1000W/m², 电池温度25°C Atmospheric quality Am1.5, Irradiance 1000w/m², Cell Temperature 25°C				

电气参数 (NMOT) / Electrical Parameters (NMOT)

型号/Model	440M	445M	450M	455M	460M
最大功率/Maximum power	321	325	329	332	336
工作点电压/Working point voltage	30.6	30.7	30.9	31.1	31.3
工作点电流/Working point current	10.51	10.57	10.63	10.68	10.73
开路电压/Open circuit voltage	36.3	36.5	36.7	36.9	37.1
短路电流/Short circuit current	11.07	11.13	11.19	11.24	11.29
NMOT	辐照度800W/m², 环境温度20°C, 风速1m/s The irradiance is 800W/m², the ambient temperature is 20 degrees, and the wind speed is 1m/s				
在该产品目录中的电性能参数并不指一块组件, 也不是合同中承诺的内容, 只做不同类型组件间比较用。 The Electrical performance parameters are neither just referred to one PV panel, nor are a part of the contract; They are only used as reference.					

机械参数 / Mechanical Parameters

组件尺寸 / Module size	1909*1133*35mm
电池片数量 / Number of solar cells	120片 (2*6*10)
重量 / Weight	19Kg ±5%
接线盒 / Junction Box	IP68、兼容MC4
线缆 / Cables	4mm², +300mm~-200mm (含接头, 可定制 / Customizable)
前板玻璃 / Front plate glass	超白, 减反射钢化玻璃/Ultra white&Minus reflection film toughened glass
正面静态载荷 / Static load on the front	5400Pa
背面静态载荷 / Static load on the back	2400Pa

包装&运输 (Packaging&Transport)

40尺集装箱运输 / 40'HQ container transport	36 Pcs/box × 22 box = 792 Pcs
17.5米车运输 / 17.5m truck transport	36 Pcs/box × 32 box = 1152 Pcs

温度参数 / Temperature Parameter

NMOT	45±2°C
最大功率(Pmax)温度系数 Temperature coefficient of maximum power(Pmax)	-0.35%/°C
开路电压(Voc)温度系数 Temperature coefficient of open circuit voltage(Voc)	-0.28%/°C
短路电流(Isc)温度系数 Temperature coefficient of short circuit current(Isc)	+0.05%/°C

极限参数 / Maximum Ratings

工作温度 Working temperature	-40~+85°C
最大系统电压 Maximum system voltage	1500VDC
最大保险丝额定电流 Maximum fuse rated current	25A