



中宜新能源
Zhongyi New Energy

ZY-M10PH/120P

0~+5W

440~460W

单晶单玻半片组件

Mono-crystalline Half-cut Module

21.3%

转换效率最高可达

High Module Conversion Efficiency



产品特性 Key Features



优异的弱光性能

Outstanding performance in weak-light conditions



突出的低温度系数

Lower operating temperature



半片电池和多主栅设计

Half-cell and MBB design



优异的机械载荷能力

Extended wind and snow load tests



环境适应性强

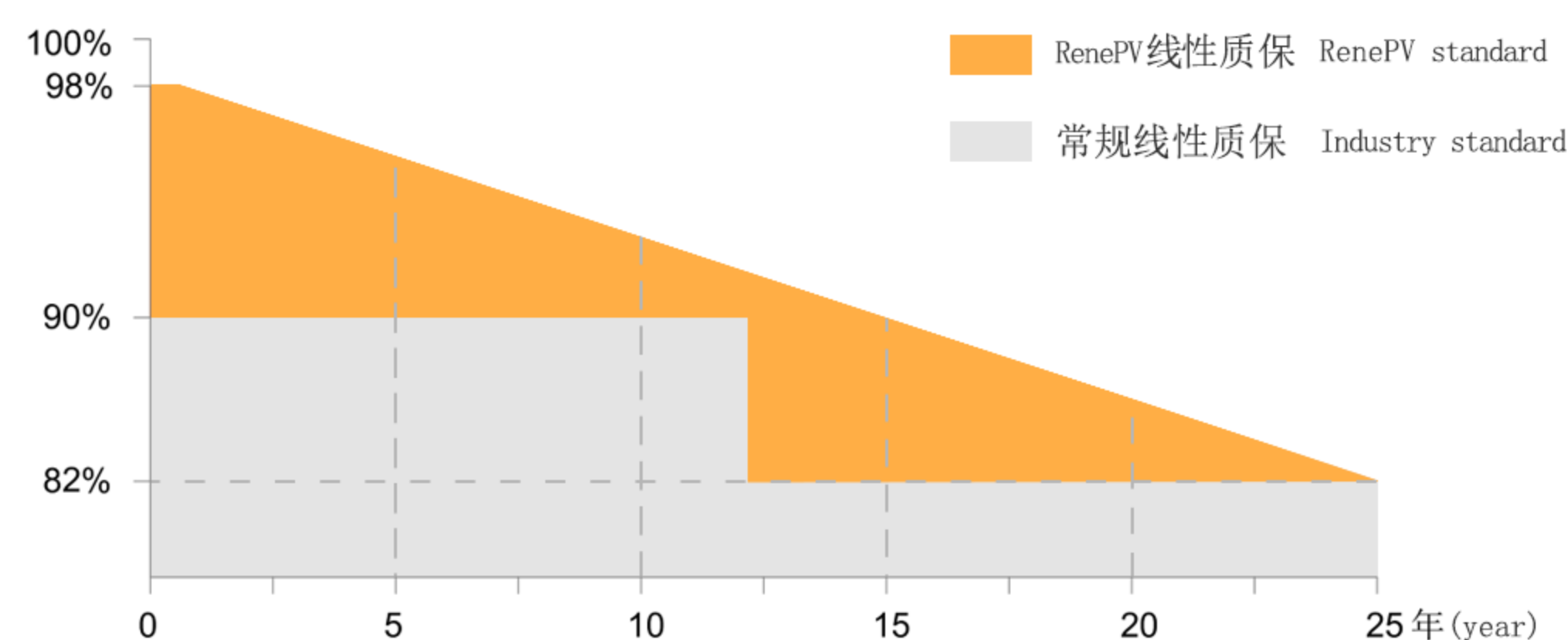
Withstanding harsh environment



使用场景定制化

Use scenario customization

质量认证 Quality Certification



12 years

12 年材料和工艺质保

Materials and workmanship warranty

25 years

25 年线性性能质保

Linear performance warranty

首年功率衰减不超过 2%

First year power degradation < 2%

后续每年功率衰减不超过 0.55%

Annual degradation < 0.55%

产品质保 Product Guarantee

ISO 9001:2015 质量管理体系 Quality management systems

ISO 14001:2015 环境管理体系 Environment management systems

ISO 45001:2018 职业健康安全管理体系

Occupational health and safety management systems

IEC 61215/IEC 61730/IEC 61701/IEC 62716/CE/CQC/INMETRO/BIS/TUV



+86-574-63097978

+86-574-63097969

info@renepv.com

浙江省慈溪高新技术产业开发区政通北路 509 号

No. 509, Zhengtong North Road, High-tech Industrial

Development Zone, Cixi City, Zhejiang, China



www.renepv.com

电性能参数 Electrical Characteristics

组件型号	Module Type	ZY440M10PH-120		ZY445M10PH-120		ZY450M10PH-120		ZY455M10PH-120		ZY460M10PH-120		
组件工作条件	Working Conditions	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	
最佳功率	Maximum Power at STC/NMOT (Pmax)	W	440	328	445	332	450	336	455	340	460	344
最佳工作电压	Optimum Operating Voltage (Vmp)	V	34.39	31.2	34.46	31.4	34.62	31.6	34.78	31.8	34.89	32.0
最佳工作电流	Optimum Operating Current (Imp)	A	12.80	10.51	12.92	10.57	13.01	10.63	13.09	10.69	13.19	10.75
开路电压	Open Circuit Voltage (Voc) ±3%	V	41.18	37.4	41.27	37.6	41.46	37.8	41.65	38.0	41.78	38.2
短路电流	Short Circuit Current (Isc) ±3%	A	13.37	11.24	13.42	11.31	13.47	11.38	13.54	11.45	13.63	11.52
组件发电效率	Module Efficiency	%	20.3		20.5		20.8		21.0		21.2	
组件最大系统电压	Maximum System Voltage	V	1500 (DC)									
最大额定值熔丝电流	Maximum Series Fuse Rating	A	25									
组件工作温度范围	Operating Module Temperature	℃	-40~+85									

STC：光照1000W/M² 组件温度25℃ 大气质量1.5 Irradiance 1000w/m² , Cell Temperature 25℃ ,Atmospheric quality Am1.5
NMOT：光照800W/M² 环境温度20℃ 风速1m/s： The irradiance is 800W/m, the ambient temperature is 20 degrees, and the wind speed is 1m/s

机械性能 Mechanical Characteristics

电池片类型 Solar Cell (No.of cells)	P型单晶(P-Mono) 182x182 60 PCS
组件尺寸 Dimensions	1903x1134x30 mm (±2mm)
组件重量 Weight	24.5 kg (±3%)
钢化玻璃 Front Glass	3.2mm镀膜钢化玻璃 low-iron tempered glass
边框 Frame	阳极氧化铝合金 anodized aluminum alloy
接线盒 Junction Box	IP68防护(3个二极管) IP68 rated(3bypass-diodes)
光伏线缆 Output Cables	4mm²/线长2x300mm或定制化(Customized length)
机械载荷 Connectors	5400Pa / 2400Pa
防火等级 Safety Rate	Class II (IEC)

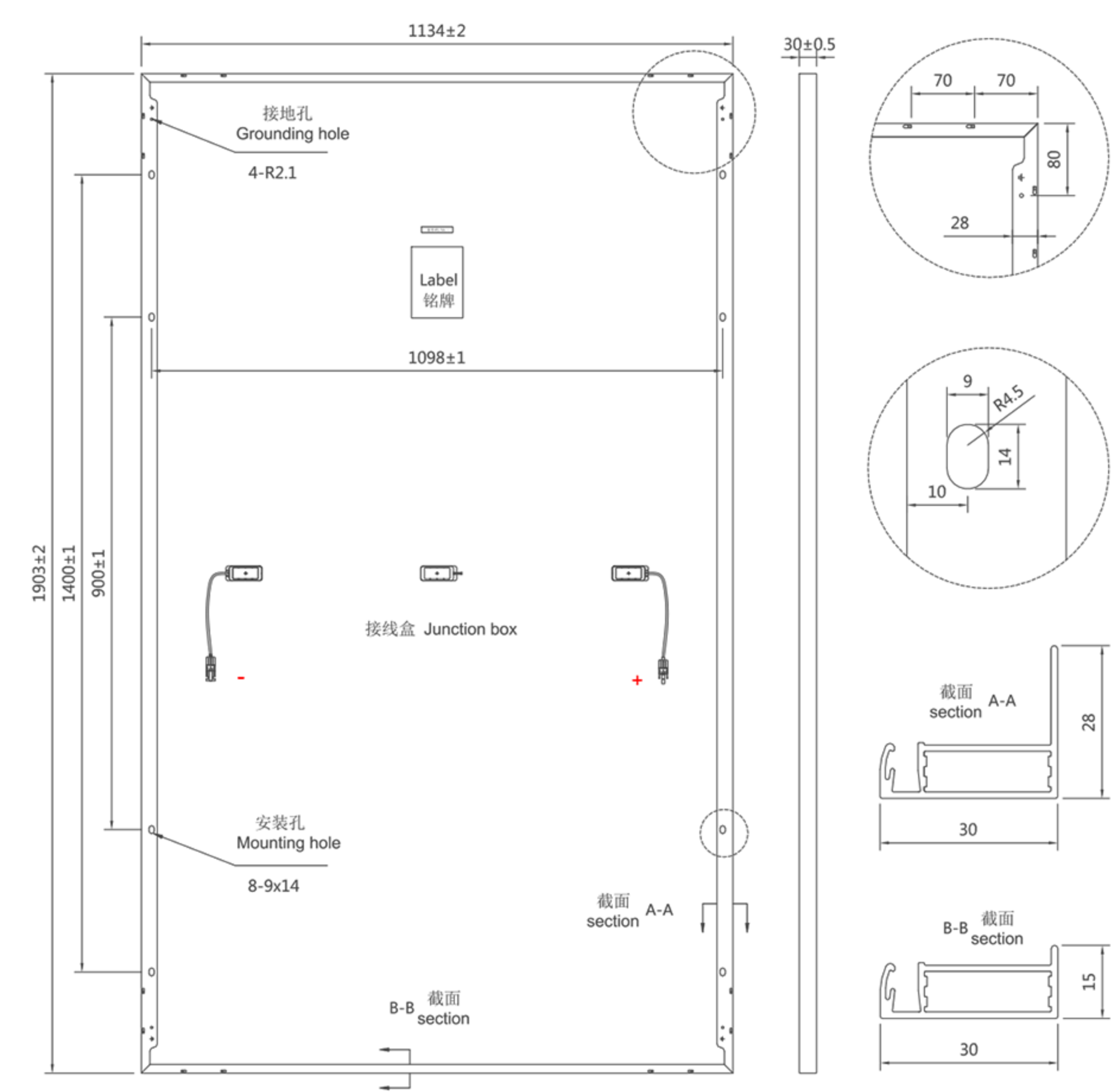
温度特性 Temperature Characteristics

最佳功率 (Pmax) 温度系数Temperature Coefficient of Pmax	%/℃	-0.37
开路电压 (Voc) 温度系数Temperature Coefficient of Voc	%/℃	-0.30
短路电流 (Isc) 温度系数Temperature Coefficient of Isc	%/℃	+0.046
额定电池工作温度(NMOT)Nominal Mondule Operating Temperature	℃	44±2

包装标准 Packing Configuration

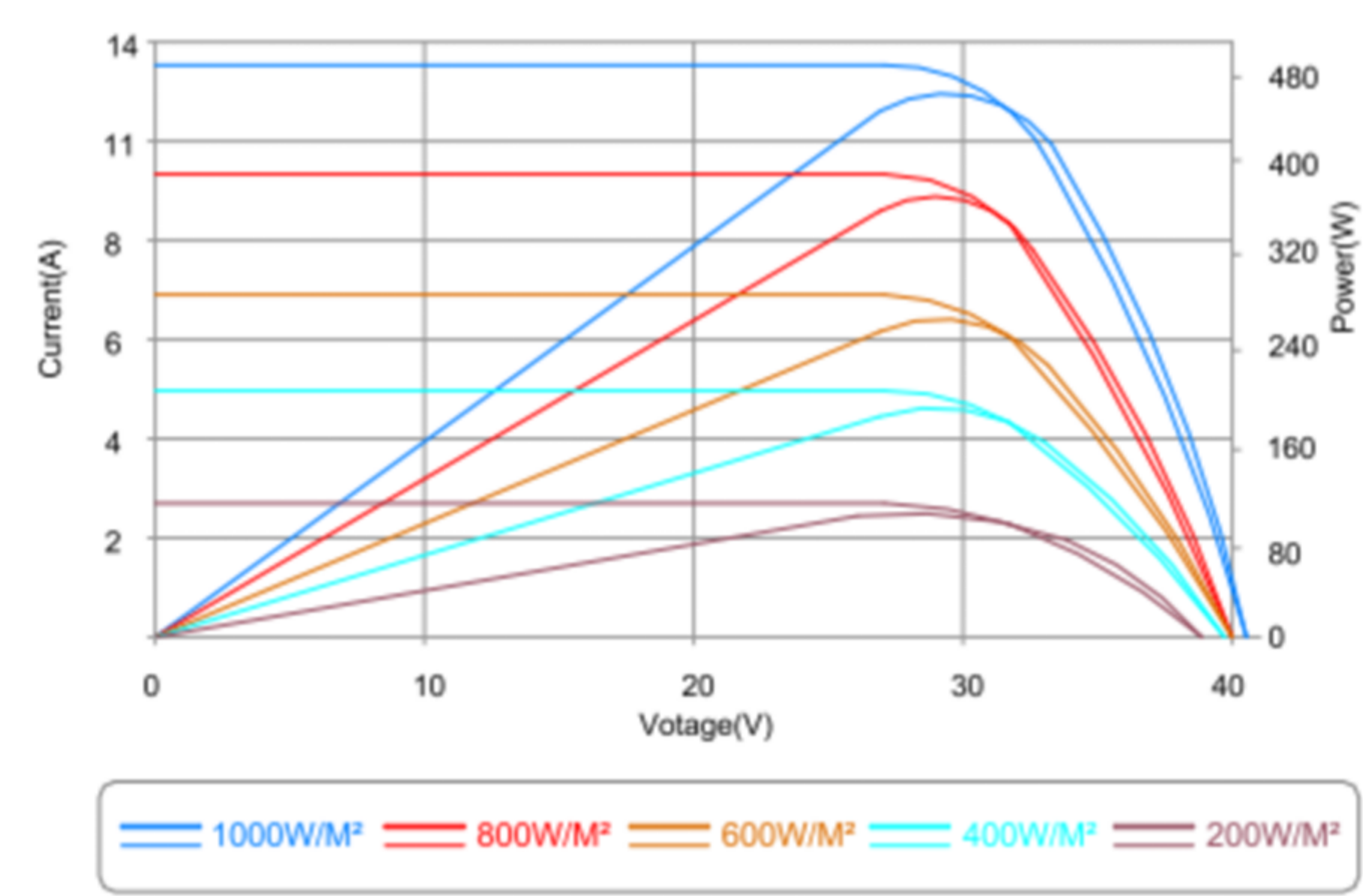
货柜 (出口货柜)Container	20’ GP		40’ HQ
托数量 Pieces per pallet (Pcs)	36		36
柜托数 Pallets per container (Pallet)	10		24
柜数量 Pieces per container (Pcs)	360		864
平板车 （国内陆运Domestic Transport）	每托尺寸MEAS: 1935x1120x1260 mm		
9.6米 装车数量	36块/托	18托/车	648块/车
13.5米 装车数量	36块/托	26托/车	936块/车
17.5米 装车数量	36块/托	34托/车	1224块/车

装配图纸 Assembly Drawing (mm)



曲线图 (450w)

电流-电压& 功率-电压曲线图（450w）
Currt-Voltage&Power-Voltage Curve



© 在该产品目录中的电性能参数并不单指一块组件，也不是合约中承诺的内容，只做不同类型组件间比较用。产品规格变更时恕不另行通知、所有技术变更中宜新能源保留最终解释权

The Electrical performance parameters are neither just referred to one panel, nor are a part of the contract; They are only used as reference Product specifications are subject to change without notice, all technical changes Zhongyi New Energy reserves the right of final interpretation