

ZY-M10NHB/144P

0~+5W  
**560~580W**

**N 型单晶双面双玻组件**

TOPCon Mono-crystalline Bifacial Module

**22.5%**

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

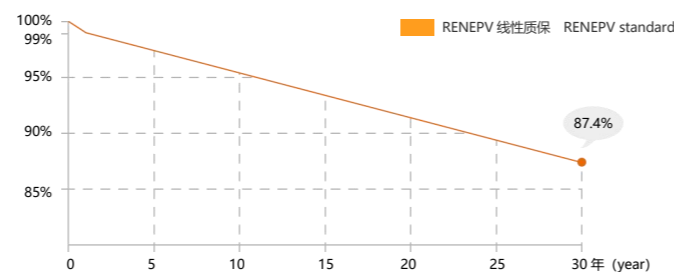
**半片电池和多主栅设计**  
Half-cell and MBB design

**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** 12年材料和工艺质保  
Materials and workmanship warranty

**30** 30年线性性能质保  
Linear performance warranty

首年功率衰减不超过 1%      First year power degradation < 1%  
后续每年功率衰减不超过 0.4%      Annual degradation < 0.4%

**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  
TUV/CE/CQC/MCS/BIS/SASO/SGS/INMETRO



**电性能参数 Electrical Characteristics**

组件型号 Module Type		ZY560M10NHB-144	ZY565M10NHB-144	ZY570M10NHB-144	ZY575M10NHB-144	ZY580M10NHB-144					
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	560	418.9	565	422.6	570	426.4	575	430.1	580	433.8
最佳工作电压 Optimum Operating Voltage(Vmp)	V	43.01	40.00	43.19	40.17	43.34	40.31	43.50	40.46	43.68	40.62
最佳工作电流 Optimum Operating Current (Imp)	A	13.02	10.47	13.08	10.52	13.15	10.58	13.22	10.63	13.28	10.68
开路电压 Open Circuit Voltage(Voc)±3%	V	51.12	47.54	51.31	47.72	51.48	47.88	51.66	48.04	51.84	48.21
短路电流 Short Circuit Current(Isc)±3%	A	13.54	11.15	13.61	11.21	13.68	11.27	13.76	11.33	13.83	11.39
组件发电效率 Module Efficiency	%	21.7		21.9		22.1		22.3		22.5	
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	30									
组件工作温度范围 Operating Module Temperature	°C	-40~+85									

STC: 光照 1000W/m<sup>2</sup> 组件温度 25°C 大气质量 1.5 Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, atmospheric quality AM1.5  
NMOT: 光照 800W/m<sup>2</sup> 环境温度 20°C 风速 1m/s Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, AM1.5, wind speed 1m/s

**机械性能 Mechanical Characteristics**

电池片类型 Solar Cell (No.of cells)	N 型单晶(N-Mono)182x182 72 PCS
组件尺寸 Dimensions	2278x1134x30 mm
组件重量 Weight	32.0 kg(±3%)
钢化玻璃 Front Glass	2.0mm 半钢化玻璃 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(3 bypass-diodes)
光伏线缆 Output Cables	4mm <sup>2</sup> /线长 2x300mm 或定制化(Customized length)
机械载荷 Mechanical Load	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	%/°C	-0.30
开路电压(Voc)温度系数 Temperature Coefficient of Voc	%/°C	-0.25
短路电流(Isc)温度系数 Temperature Coefficient of Isc	%/°C	+0.05
额定电池工作温度(NMOT)Nominal Module Operating Temperature	°C	45±2

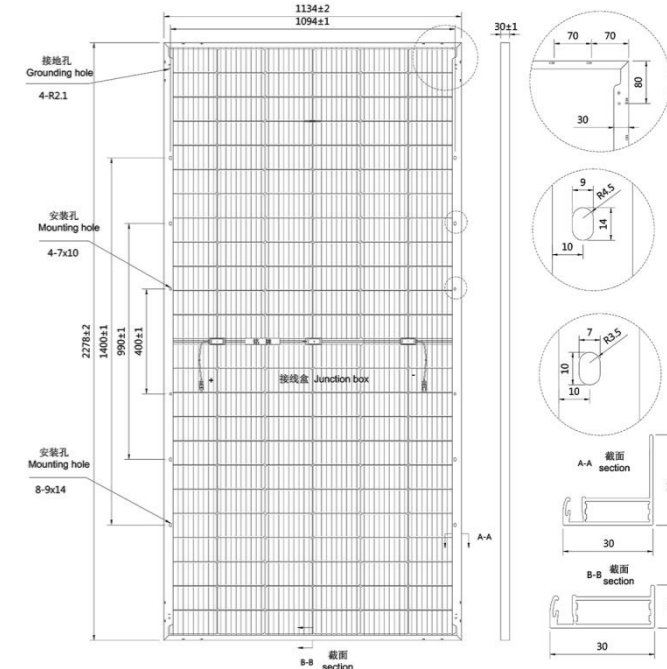
**不同背面功率增益 Different Backside Power Gain(570W)**

功率增益 Power Gain		5%	15%	25%
最大功率 Maximum Power Pmp	W	598.5	655.5	712.5
最佳工作电压 Optimum Operating Voltage(Voc)	V	43.34	43.34	43.34
最佳工作电流 Optimum Operating Current(Imp)	A	13.81	15.12	16.43
开路电压 Open Circuit Voltage (Voc)	V	51.48	51.48	51.48
短路电流 Short Circuit Current(Imp)	A	14.37	15.74	17.11

**包装标准 Packing Configuration**

货柜(出口)Container 40'HQ	36PCS/pallet	20pallet/40'HQ	720 PCS/40'HQ
17.5米装车数量	30 边框	36PCS/托	30托/车 1080PCS/车

**装配图纸 Assembly Drawing (mm)**



**曲线图 I-V Curves(570W)**

