



Ningbo Zhongyi New Energy Co., Ltd.

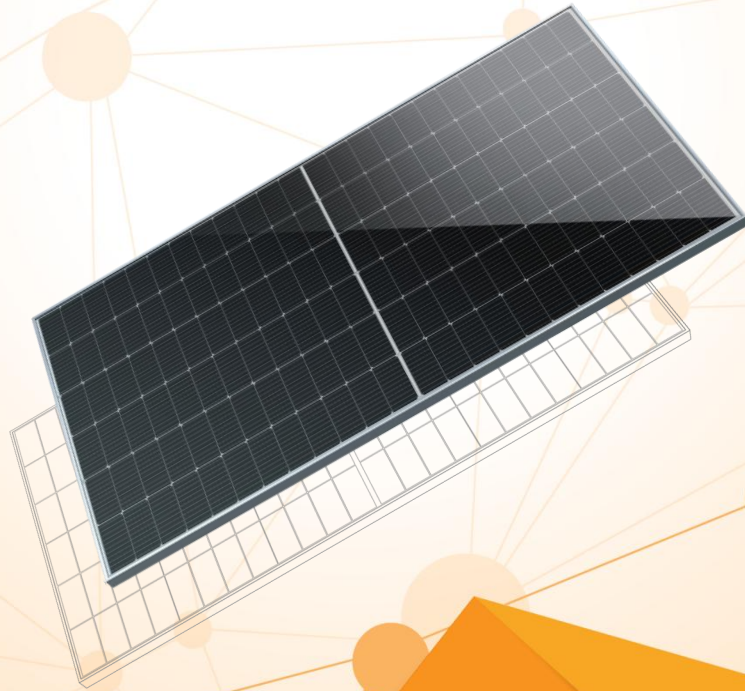
Ningbo Reneled New Energy Co., Ltd.

TOPCon Mono-crystalline PV Module

182 Cell-16BB | Non-destructive Cut | Bifacial

Module Type: ZY-M10N-54 | ZY-M10N-60 | ZY-M10N-66

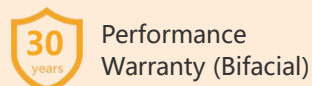
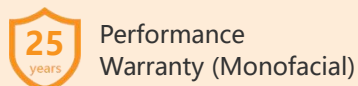
ZY-M10N-72 | ZY-M10N-78



High Power High Compatibility

Outstanding performance in weak-light conditions, lower operating temperature

Different types of modules are suitable for various application scenarios



www.renepv.com

M182-72N
TOPCon

585W

22.6%

Module efficiency

ZY585M10NHB-144

TOPCon Mono-crystalline Bifacial Module

Electrical Specifications

Module Type		ZY585M10NHB-144	
STC: AM1.5 Temperature 25°C Irradiance 1000 W/m ²	Peak Power(Pmax)±3%	(W)	585
	Power Tolerance	(W)	0~+5
	Max.Power Voltage(Vmp)	(V)	43.83
	Max.Power Current(Imp)	(A)	13.35
	Open-circuit Voltage(Voc)±3%	(V)	52.01
NMOT: AM1.5 Temperature 20°C Wind speed 1m/s Irradiance 800 W/m ²	Short-circuit Current(Isc)+3%	(A)	13.90
	Peak Power(Pmax)±3%	(W)	437.6
	Max.Power Voltage(Vmp)	(V)	40.76
	Max.Power Current(Imp)	(A)	10.74
	Open-circuit Voltage(Voc)	(V)	48.37
Short-circuit Current(Isc)	(A)	11.45	
Operating Temperature	(°C)	-40~+85	
Max. Series Fuse Rating	(A)	25	
Max. System Voltage(DC)	(V)	1500 (IEC)	

Mechanical Specifications

Solar Cells	N-Mono-182.2*91.88mm		
Arrangement	Type-6*12*2		
Front Glass	2.0mm tempered glass		
Back Glass	2.0mm tempered glass		
Frame	Anodized aluminium alloy		
Junction Box	IP68, 3 diodes		
Cables	4.0mm ² photovoltaic cables		
Connectors	MC4 compatible/IP68		
Maximum Load Capacity	Snow-5400Pa/Wind-2400Pa		
Safety Rate	Class II (IEC)		
Fire Rate	Class C (TUV)		

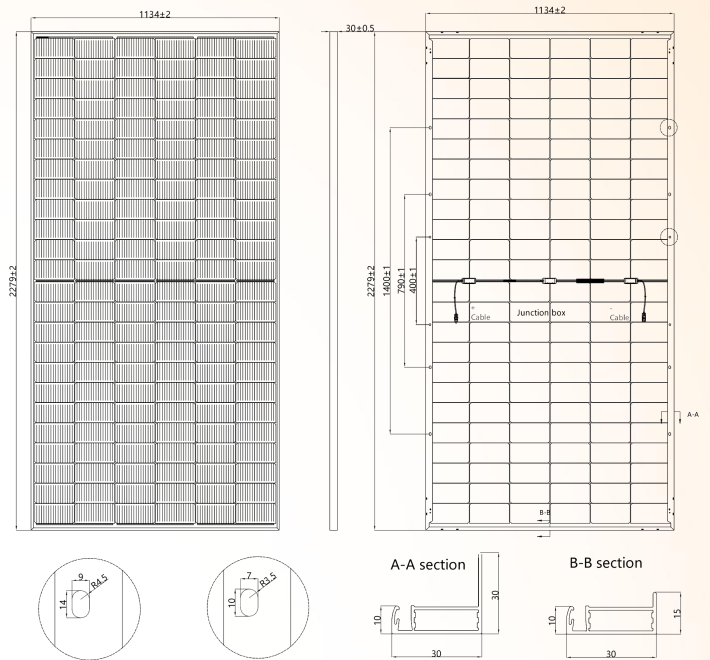
Packing Configuration

Package Weight & Size	1210Kg/pallet & 2310*1140*1260mm		
20'GP Container	1 pcs/carton	298 cartons/20'GP	298 pcs
40'HQ Container	37 pcs/pallet	20 pallets/40'HQ	740 pcs
13.5m Land Truck	37 pcs/pallet	22 pallets/truck	814 pcs

Dimensions of PV Module

Module Dimensions 2279(±2)*1134(±2)*30mm

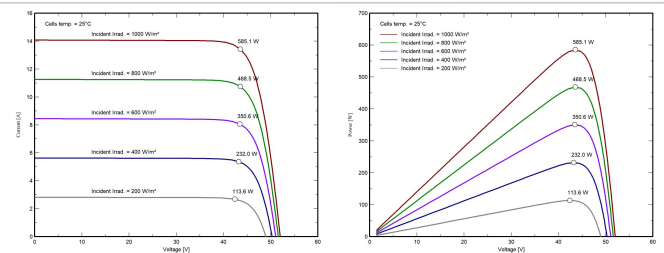
Module Weight 31.6 kg(±3%)



Temperature Characteristics

Temperature Coefficient (Pmax)	δ[%/°C]	-0.30
Temperature Coefficient (Voc)	β[%/°C]	-0.25
Temperature Coefficient (Isc)	α[%/°C]	+0.05
Nominal Operating Cell Temperature	NMOT	45°C±2°C

I-V & P-V Curves



Current-Voltage Characteristic

Power-Voltage Characteristic

Different Backside Power Gain

Power Gain		5%	15%	25%
Maximum Power(Pmax)	(W)	614.3	672.8	731.3
Max.Power Voltage(Vmp)	(V)	43.85	43.85	43.85
Max.Power Current(Imp)	(A)	14.01	15.34	16.68
Open-circuit Voltage(Voc)	(V)	52.02	52.02	52.02
Short-circuit Current(Isc)	(A)	14.95	16.37	17.79



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