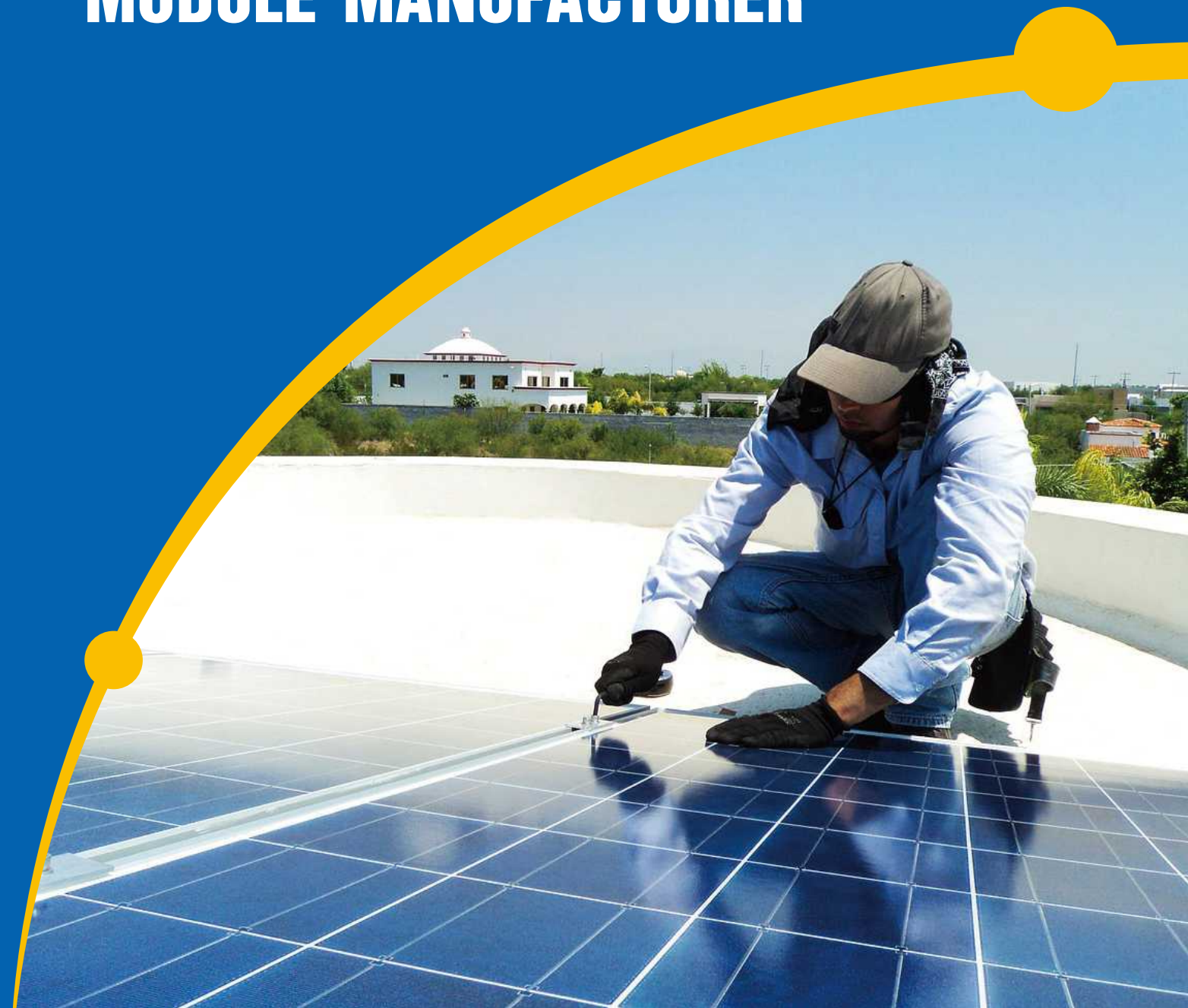


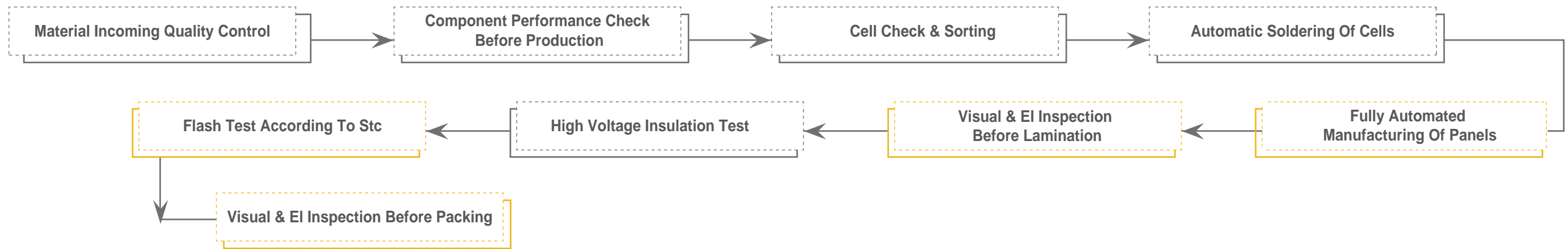
**Solar** |   
**Master**  
Renewable Energy Solutions



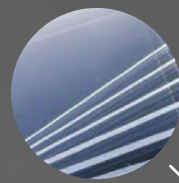
# PROFESSIONAL SOLAR PV MODULE MANUFACTURER



# Production process

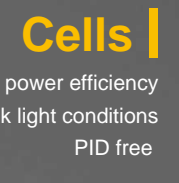


# Material advantage



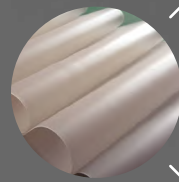
## Glass

Anti-ref;ective coating to increase the module efficiency up to 20%  
Light transmittance improvement above 3%  
Self-cleaning function



## Cells

High power efficiency  
Stable performance under weak light conditions  
PID free



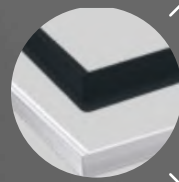
## Eva Film

Light transmittance more than 92%  
Snail trail prevention treatment



## Back Sheet

Low moisture permeability against snail trail defect  
Excellent electric insulation for high system voltage up to 1500V  
Outstanding weatherproof performance



## Frame

Strong mechanical load resistance up to 5400 Pa  
Anodic oxidation layer resistant to chemical corrosion  
Silver and black color optional

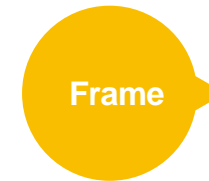
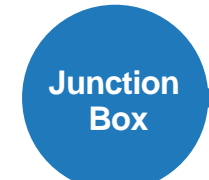
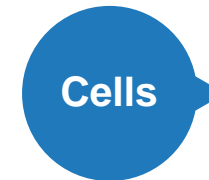


## Junction Box

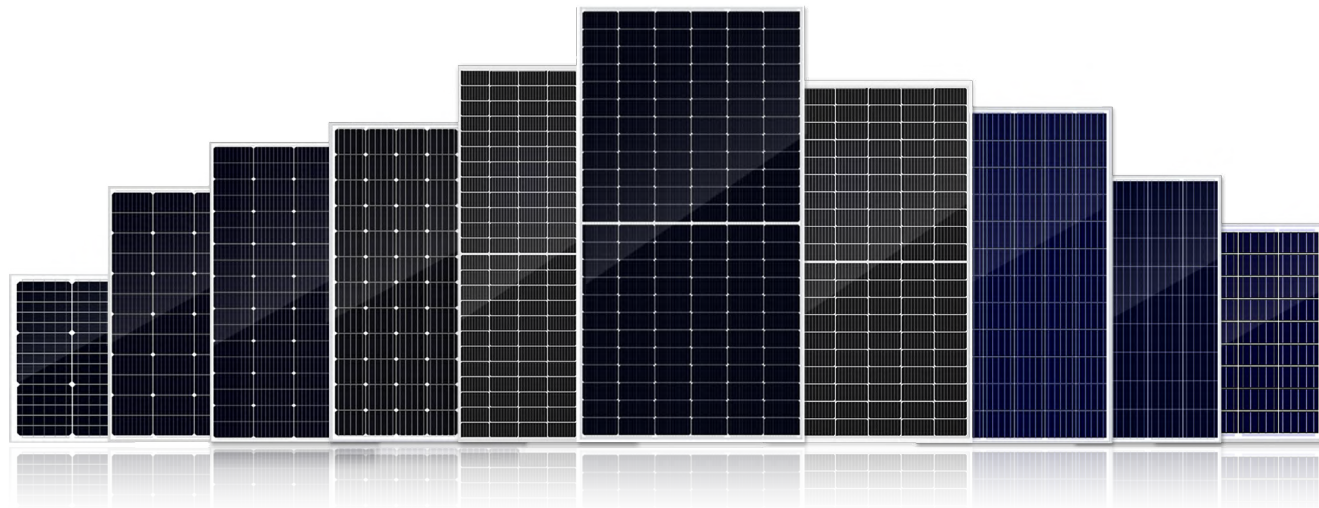
IP 67 protection grade  
High quality diodes for electric safety  
1500V system voltage available

# Material partners

Brand-known raw materials to ensure maximum inner quality



# Technology Highlights



Monocrystalline solar module 10W-560W

Polycrystalline solar module 10W-360W

- Excellent power generation performance under low-light irradiation environments.
- Anti-reflective and anti-soiling surface reduces power loss from dirt and dust.
- High salt and ammonia resistance certified by TUV.
- Certified to withstand extreme temperatures, heavy loadings and impacts.
- Excellent Anti-PID performance guarantee limited.
- 100% EL test.

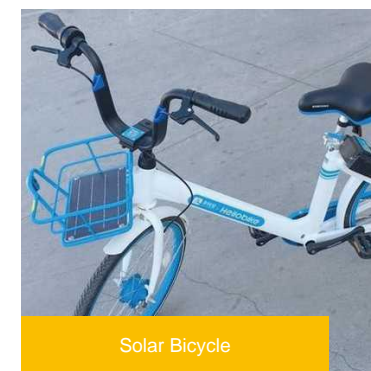
# Application diagram



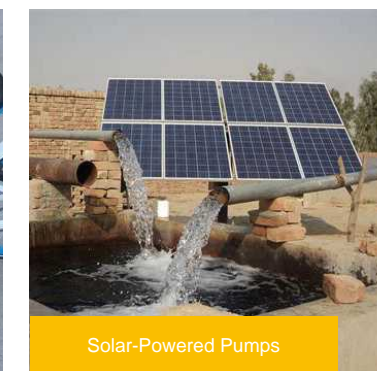
5KW Roof Project



Solar Street Lights



Solar Bicycle



Solar-Powered Pumps



Color Steel Tile  
530KW Solar Power Project

Fenghua District



Rooftop Installation  
10KW Solar Project

Netherlands



Flat Cement Floor  
3MW Solar Plant

Ningbo City



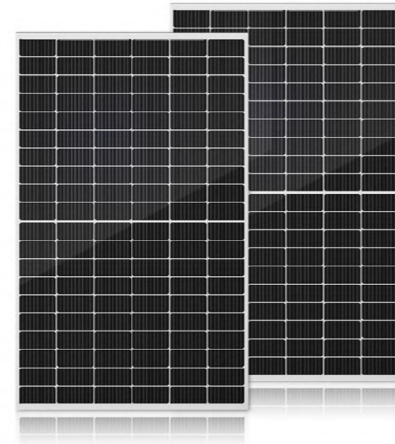
Ground Installation  
5MW Solar Plant

Qinghai Province

# 166M HALF CELL

## 360W-370W

- Outstanding mechanical load resistance**  
2400 Pa wind load, 5400 Pa snow load
- Anti-PID(potential induced degradation)**  
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours
- Great Durability against extreme conditions**  
Passed salt mist corrosion test, ammonia corrosion test, dust&sand test, fire test, all certified by TUV
- Double electroluminescence ( EL ) tests**  
Carefully inspected before and after lamination to guarantee fault-free modules

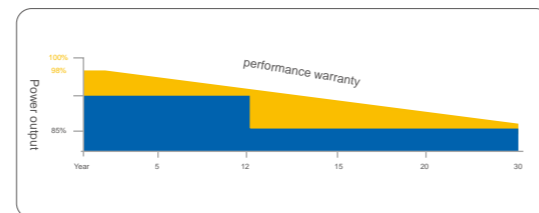
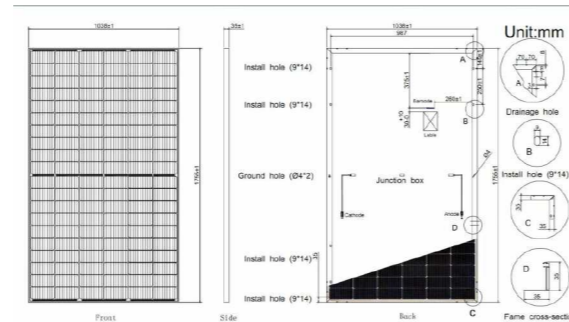


### ELECTRICAL PERFORMANCE

Model Type	ST-370W		ST-380W	
	STC	NOCT	STC	NOCT
Dimensions (L / W / H)	1755x1038x35		1755x1038x35	
Peak Power at STC (Pmax)	370	276	370	284
Maximum Power Voltage (Vmp)	34.40	32.00	34.80	32.40
Maximum Power Current (Imp)	10.76	8.63	10.92	8.76
Open Circuit Voltage (Voc)	40.9±3%	38.3±3%	41.3±3%	38.7±3%
Short Circuit Current (Isc)	11.52±3%	9.32±3%	11.69±3%	9.45±3%
Module Efficiency(%)	20.31		20.85	

### THERMAL CHARACTERISTICS & OPERATING CONDITIONS

Maximum System Voltage(V)	1500/1000V
Maximum Series Fuse Rating(A)	20A
Power Tolerance	0~+3W
Pmax Temperature Coefficients(W/°C)	-0.400%
Voc Temperature Coefficients(V/°C)	-0.290%
Isc Temperature Coefficients(A/°C)	+0.048%
NOCT Nominal Operating Cell Temperature(°C)	45±2°C
Operating and Storage Temperature(°C)	-40°C~+85°C



### CONSTRUCTION MATERIALS

Front Cover (Material / Thickness)	low-iron tempered glass / 3.2mm
Cell (Quantity/Type/Dimensions)	166*83 Mono
No. of Cells	120(6*10)*2
Frame (Material)	Anodized Aluminium Alloy
Junction Box (Protection Degree)	IP68 3 diodes
Cable (Length/Cross-Sectional Area)	4mm² cable 30cm+MC4

### PACKAGING SPECIFICATIONS

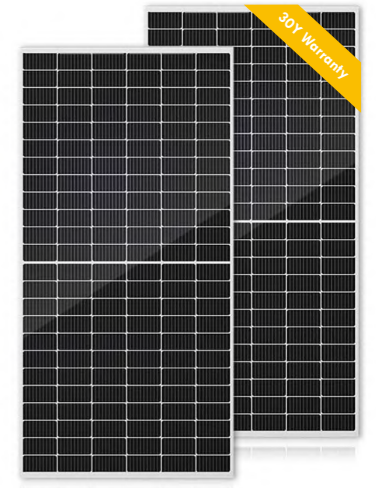
- 20FT container 12Packages/354PCS
- 40HQ container 26Packages/858PCS

STC ☀ Irradiance 1000W/m² 🌡 Cell Temperature 25 °C AM=1.5  
 NOCT ☀ Irradiance 800W/m² 🌡 Ambient Temperature 20 °C AM=1.5

# 166M HALF CELL

## 430W-450W

- Outstanding mechanical load resistance**  
2400 Pa wind load, 5400 Pa snow load
- Anti-PID(potential induced degradation)**  
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours
- Great Durability against extreme conditions**  
Passed salt mist corrosion test, ammonia corrosion test, dust&sand test, fire test, all certified by TUV
- Double electroluminescence ( EL ) tests**  
Carefully inspected before and after lamination to guarantee fault-free modules

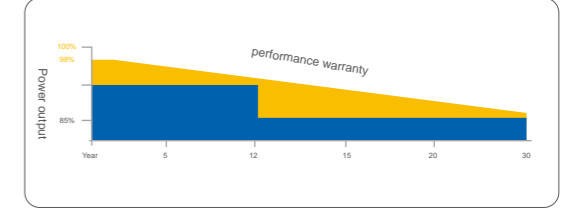
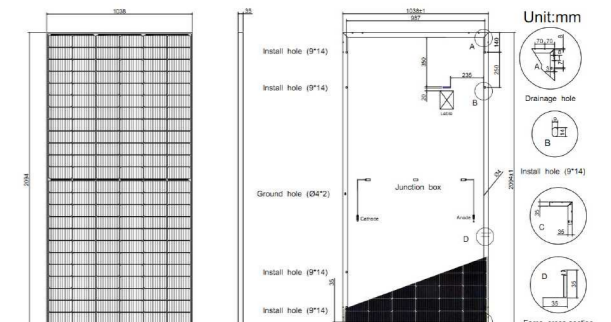


### ELECTRICAL PERFORMANCE

Model Type	ST-430W		ST-440W		ST-450W	
	STC	NOCT	STC	NOCT	STC	NOCT
Dimensions (L / W / H)	2094x1038x35		2094x1038x35		2094x1038x35	
Peak Power at STC (Pmax)	430	321	440	329	450	336
Maximum Power Voltage (Vmp)	40.70	37.90	41.10	38.30	41.50	38.60
Maximum Power Current (Imp)	10.57	8.47	10.71	8.60	10.85	8.70
Open Circuit Voltage (Voc)	48.5±3%	45.5±3%	48.9±3%	45.8±3%	49.3±3%	46.2±3%
Short Circuit Current (Isc)	11.31±3%	9.15±3%	11.46±3%	9.27±3%	11.6±3%	9.38±3%
Module Efficiency(%)	19.78		20.24		20.7	

### THERMAL CHARACTERISTICS & OPERATING CONDITIONS

Maximum System Voltage(V)	1500/1000V
Maximum Series Fuse Rating(A)	20A
Power Tolerance	0~+3W
Pmax Temperature Coefficients(W/°C)	-0.400%
Voc Temperature Coefficients(V/°C)	-0.290%
Isc Temperature Coefficients(A/°C)	+0.048%
NOCT Nominal Operating Cell Temperature(°C)	45±2°C
Operating and Storage Temperature(°C)	-40°C~+85°C



### CONSTRUCTION MATERIALS

Front Cover (Material / Thickness)	low-iron tempered glass / 3.2mm
Cell (Quantity/Type/Dimensions)	166*83 Mono
No. of Cells	144 (6*12)*2
Frame (Material)	Anodized Aluminium Alloy
Junction Box (Protection Degree)	IP68 3 diodes
Cable (Length/Cross-Sectional Area)	4mm² cable 100cm+MC4

### PACKAGING SPECIFICATIONS

- 20FT container 10Packages/245PCS
- 40HQ container 22Packages/726PCS

STC ☀ Irradiance 1000W/m² 🌡 Cell Temperature 25 °C AM=1.5  
 NOCT ☀ Irradiance 800W/m² 🌡 Ambient Temperature 20 °C AM=1.5



# 182M HALF CELL

## 490W-500W

- Outstanding mechanical load resistance**  
2400 Pa wind load, 5400 Pa snow load
- Anti-PID(potential induced degradation)**  
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours
- Great Durability against extreme conditions**  
Passed salt mist corrosion test, ammonia corrosion test, dust&sand test, fire test, all certified by TÜV
- Double electroluminescence ( EL ) tests**  
Carefully inspected before and after lamination to guarantee fault-free modules

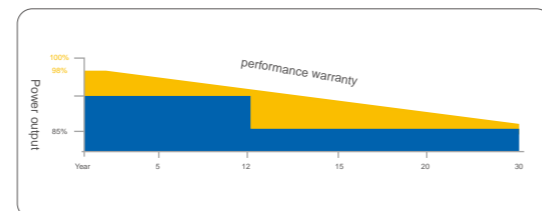
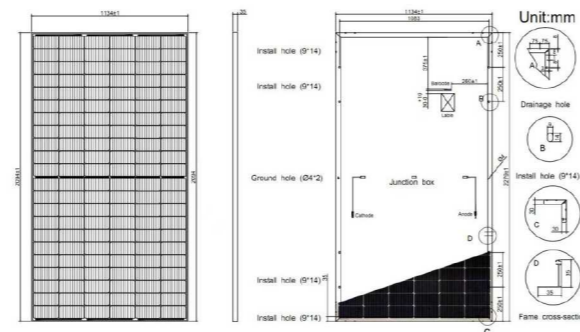


### ELECTRICAL PERFORMANCE

Model Type	YH490W-36MH		YH495W-36MH		YH500W-36MH	
	STC	NOCT	STC	NOCT	STC	NOCT
Dimensions (L / W / H)	2094x1134x35		2094x1134x35		2094x1134x35	
Peak Power at STC (Pmax)	490	364	495	368	500	372
Maximum Power Voltage (Vmp)	38.12	35.34	38.28	35.50	38.44	35.66
Maximum Power Current (Imp)	12.86	10.31	12.94	10.37	13.01	10.43
Open Circuit Voltage (Voc)	54.34±3%	42.48±3%	45.54±3%	42.66±3%	45.74±3%	42.84±3%
Short Circuit Current (Isc)	13.64±3%	10.99±3%	13.73±3%	1.07±3%	13.82±3%	11.15±3%
Module Efficiency(%)	20.63		20.84		21.05	

### THERMAL CHARACTERISTICS & OPERATING CONDITIONS

Maximum System Voltage(V)	1500/1000V
Maximum Series Fuse Rating(A)	20A
Power Tolerance	0~+3W
Pmax Temperature Coefficients(W/°C)	-0.400%
Voc Temperature Coefficients(V/°C)	-0.290%
Isc Temperature Coefficients(A/°C)	+0.048%
NOCT Nominal Operating Cell Temperature(°C)	45±2°C
Operating and Storage Temperature(°C)	-40°C~+85°C



### CONSTRUCTION MATERIALS

Front Cover (Material / Thickness)	low-iron tempered glass / 3.2mm
Cell (Quantity/Type/Dimensions)	182*91 Mono
No. of Cells	132 (6*11)*2
Frame (Material)	Anodized Aluminium Alloy
Junction Box (Protection Degree)	IP68 3 diodes
Cable (Length/Cross-Sectional Area)	4mm² cable 100cm+MC4

### PACKAGING SPECIFICATIONS

- 20FT container 10Packages/245PCS
- 40HQ container 22Packages/682PCS

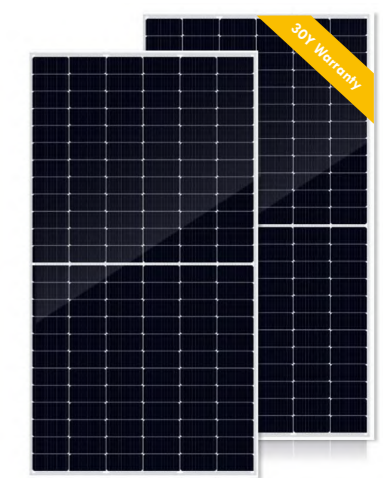
STC ☀ Irradiance 1000W/m² 🌡 Cell Temperature 25 °C AM=1.5  
NOCT ☀ Irradiance 800W/m² 🌡 Ambient Temperature 20 °C AM=1.5



# 182M HALF CELL

## 535W-550W

- Outstanding mechanical load resistance**  
2400 Pa wind load, 5400 Pa snow load
- Anti-PID(potential induced degradation)**  
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours
- Great Durability against extreme conditions**  
Passed salt mist corrosion test, ammonia corrosion test, dust&sand test, fire test, all certified by TÜV
- Double electroluminescence ( EL ) tests**  
Carefully inspected before and after lamination to guarantee fault-free modules

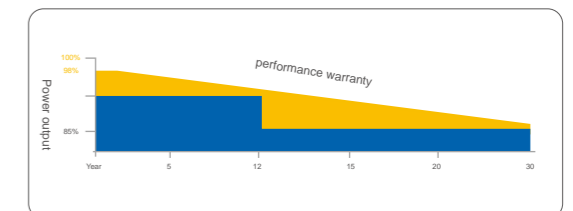
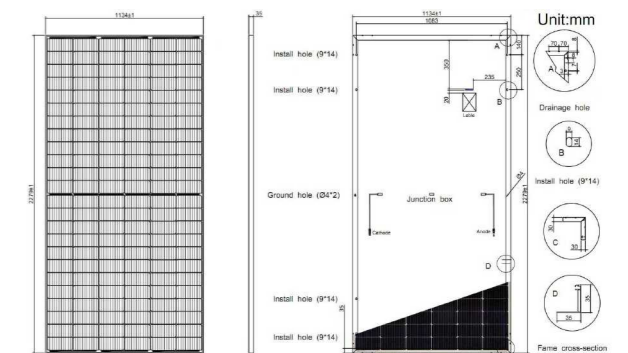


### ELECTRICAL PERFORMANCE

Model Type	ST-530W		ST-540W		ST-550W	
	STC	NOCT	STC	NOCT	STC	NOCT
Dimensions (L / W / H)	2279x1134x35		2279x1134x35		2279x1134x35	
Peak Power at STC (Pmax)	535	397.7	540	401.4	550	408.9
Maximum Power Voltage (Vmp)	41.60	38.62	41.76	38.78	42.10	39.09
Maximum Power Current (Imp)	12.84	10.30	12.93	10.35	13.06	10.46
Open Circuit Voltage (Voc)	49.5±3%	46.36±3%	49.7±3%	46.54±3%	50.1±3%	46.92±3%
Short Circuit Current (Isc)	13.61±3%	10.97±3%	13.72±3%	11.05±3%	13.9±3%	11.2±3%
Module Efficiency(%)	20.93		21.12		21.32	

### THERMAL CHARACTERISTICS & OPERATING CONDITIONS

Maximum System Voltage(V)	1500/1000V
Maximum Series Fuse Rating(A)	20A
Power Tolerance	0~+3W
Pmax Temperature Coefficients(W/°C)	-0.400%
Voc Temperature Coefficients(V/°C)	-0.290%
Isc Temperature Coefficients(A/°C)	+0.048%
NOCT Nominal Operating Cell Temperature(°C)	45±2°C
Operating and Storage Temperature(°C)	-40°C~+85°C



### CONSTRUCTION MATERIALS

Front Cover (Material / Thickness)	low-iron tempered glass / 3.2mm
Cell (Quantity/Type/Dimensions)	182*91 Mono
No. of Cells	144 (6*12)*2
Frame (Material)	Anodized Aluminium Alloy
Junction Box (Protection Degree)	IP67/IP68
Cable (Length/Cross-Sectional Area)	4mm² cable 30cm+mc4

### PACKAGING SPECIFICATIONS

- 20FT container 10Packages/275PCS
- 40HQ container 22Packages/620PCS

STC ☀ Irradiance 1000W/m² 🌡 Cell Temperature 25 °C AM=1.5  
NOCT ☀ Irradiance 800W/m² 🌡 Ambient Temperature 20 °C AM=1.5