

# Shenzhen Solarparts Inc. Version 2023

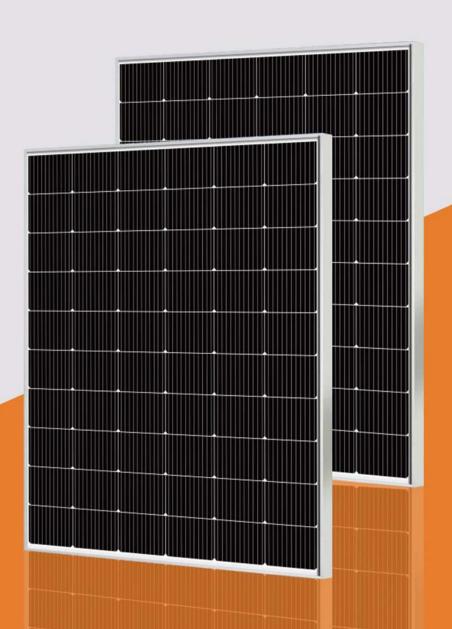
# 300-550W

Mono solar module in 182mm cell spec sheet

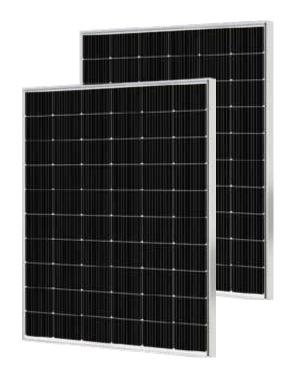








### **Mechanical Diagrams**



## **SP300M-60**

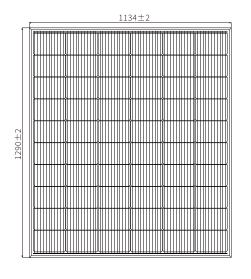
#### Comprehensive Certificates

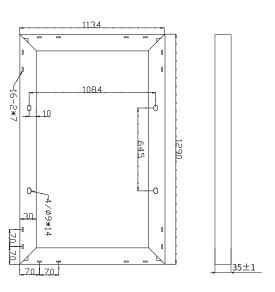
- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems











PS:Frame color and cable length can be customized

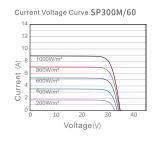
Mechan	ical Parameters
Solar Cell(Type/Size)	MONO(182mm)
Solar Cells Number	60Pcs(6x10)
Dimension	1290x1134x35mm
Weight	14.3Kg/Pcs
Tempered Glass	3.2 mm High Permeability Coated
Frame	Anodized aluminum alloy
Junction Box	IP67、3*bypass diode
Cable	4.0mm², (+)1000mm/(-)1000mm
Connector	Original MC4/Compatible MC4
Mechanical Load	Front 5400PA/back 2400PA

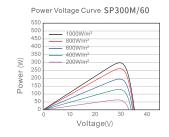
Pa	cking
Module Type	SP300M-60
Carton Size	1310x1160x85mm
Number	2Pcs/Ctn
Weight	29Kg/Ctn
Volume	0.129Cbm/Ctn
20GP Container	444Pcs
40HQ Container	1088Pcs

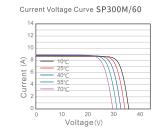
### **Electrical Parameters at (STC)**

Module	Power	Module	Voltage at	Current at	Open Circuit	Short Circuit	Power
	(W)	Efficiency(%)	Pmax(Vmp)	Pmax(Imp)	Voltage(Voc)	Current(Isc)	Tolerance(w)
SP300M	300W	20.50%	34.20	8.77	41.04	9.30	±3%

#### **Characteristics**











Battery temperature:25°C atmosphere quality=15





Battery temperature:20°C atmosphere quality=15



#### **Mechanical Diagrams**

## **SP360M-60**

#### **Comprehensive Certificates**

- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems

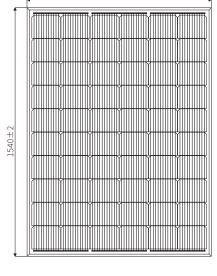




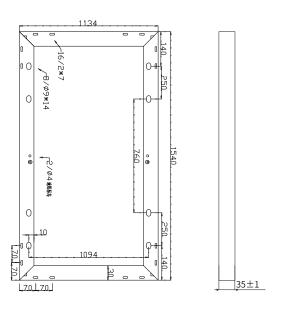








1134±2



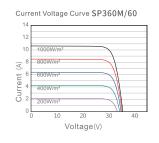
Mechan	ical Parameters
Solar Cell(Type/Size)	MONO(182mm)
Solar Cells Number	60Pcs(6x10)
Dimension	1540x1134x35mm
Weight	18.8Kg/Pcs
Tempered Glass	3.2 mm High Permeability Coated
Frame	Anodized aluminum alloy
Junction Box	IP67、3*bypass diode
Cable	4.0mm², (+)1000mm/(-)1000mm
Connector	Original MC4/Compatible MC4
Mechanical Load	Front 5400PA/back 2400PA

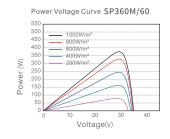
F	acking
Module Type	SP360M-60
Carton Size	1560x1160x85mm
Number	2Pcs/Ctn
Weight	38Kg/Ctn
Volume	0.153Cbm/Ctn
20GP Container	386Pcs
40HQ Container	902Pcs

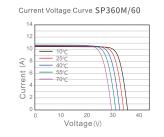
### **Electrical Parameters at (STC)**

Module	Power	Module	Voltage at	Current at	Open Circuit	Short Circuit	Power
	(W)	Efficiency(%)	Pmax(Vmp)	Pmax(Imp)	Voltage(Voc)	Current(Isc)	Tolerance(w)
SP360M	360W	20.60%	34.20	10.53A	41.04	11.16	±3%

#### **Characteristics**





















## **Mechanical Diagrams**



## SP400M-54

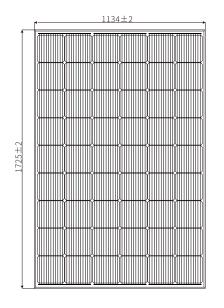
#### **Comprehensive Certificates**

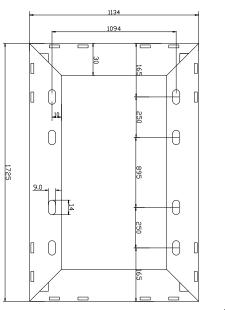
- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems











<sup>†</sup>35±1

PS:Frame color and cable length can be customized

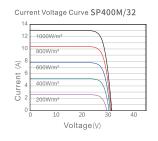
Mechan	ical Parameters
Solar Cell(Type/Size)	MONO(182mm)
Solar Cells Number	54Pcs(6x9)
Dimension	1725x1134x35mm
Weight	21.3Kg/Pcs
Tempered Glass	3.2 mm High Permeability Coated
Frame	Anodized aluminum alloy
Junction Box	IP67、3*bypass diode
Cable	4.0mm², (+)1000mm/(-)1000mm
Connector	Original MC4/Compatible MC4
Mechanical Load	Front 5400PA/back 2400PA

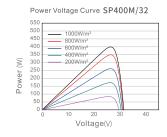
	Packing
Module Type	SP400M-54
Carton Size	1745x1160x85mm
Number	2Pcs/Ctn
Weight	43Kg/Ctn
Volume	0.172Cbm/Ctn
20GP Container	340Pcs
40HQ Container	810Pcs

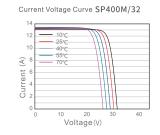
### **Electrical Parameters at (STC)**

Module	Power (W)	Module Efficiency(%)	Voltage at Pmax(Vmp)	Current at Pmax(Imp)	Open Circuit Voltage(Voc)	Short Circuit Current(Isc)	Power Tolerance(w)	
SP400M	400W	20.70%	30.78	13.00	37.02	13.78	±3%	

#### **Characteristics**























## MSD450M-120

Mono Half-cut Single/Double Glass Module

430-455/MB Series

#### INTRODUCTION

MONO half-cut single / double glass module, assembled with multi-busbar PERC technique and half-cut structure, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

## LCOE save 6-8%



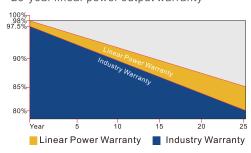






#### First-class Quality Assurance

- 10-year warranty for material and technology
- 25-year linear power output warranty



#### Comprehensive Certificates

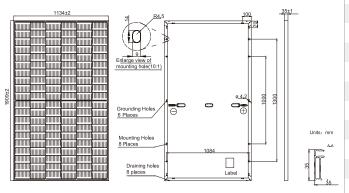
- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems







#### **Mechanical Diagrams**



#### Specifications

Solar Cell(Type/Size	) MONO(182mm)
Solar Cells Number	120pcs(6*10)
Dimensions	1909×1134×35mm
Weight	23.9Kg/Pcs
Structure	3.2 Glass + EVA film + Back
Frame	Anodized Aluminum Alloy
Junction Box	IP68 \ 3*Bypass Diode
Cable Cross Section Size	4.0mm²,(+)300mm/(-)400mm
Mechanical Load	Front 5400Pa/Back 2400Pa
Packing Number	31Pcs/Pallet
Packing Volume	2.834Cbm/Pallet
40'HQ Container	744Pcs

PS:Frame color and cable length can be customized

Electrical Parameters at STC						
Module Type	MSD430P	MSD435P	MSD440P	MSD445P	MSD450P	MSD455F
Rate Maximum Power( Pmax/W)	430	435	440	445	450	455
Module Efficiency(%)	19.90	20.10	20.30	20.60	20.80	21.10
Open Circuit Volatge(Voc/V)	40.65	40.80	40.95	41.10	41.25	41.40
Short Circuit Current(Isc/A)	13.59	13.67	13.74	13.82	13.89	13.97
Voltage at Pmax(Vmp/V)	33.89	30.09	34.28	34.48	34.67	34.87
Current at Pmax(Imp/A)	12.69	12.77	12.84	12.91	12.98	13.05
Power Tolerance			0~+5	ōw		

Temperature Coefficent of Isc +0.0466°C

Temperature Coefficent of Voc -0.2766°C

Temperature Coefficent of Pmax -0.3506°C

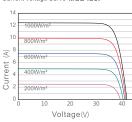
STC Irradiance 1000W/m² Cell Temperature 25°C AM1.5

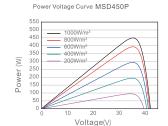
Remark: Electrical data in this catalogue does not refer to a single module, and it's not part of the offer. It only serves for the comparison among different module types

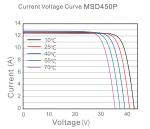
Electrical Parameters at NOCT O						Operating Conditions		
Module Type	MSD430P	MSD435P	MSD440P	MSD445P	MSD450P	MSD455P	Operating Temperature	-40~+85°C
Rate Maximum Power( Pmax/W)	327	330	333	336	340	343	Maximum System Voltage	1500VDC
Open Circuit Voltage(Voc.V)	38.15	38.28	38.40	38.53	38.65	38.77	NOCT	45±2°C
Short Circuit Current(Isc/A))	10.91	10.95	10.99	11.03	11.08	11.12	Fireproof Performance	Glass C
Voltage at Pmax(Vmp/V)	31.89	32.05	32.19	32.35	32.51	32.67	Maximum Series Fuse	25A
Currrnt at Pmax(Imp/A)	10.26	10.30	10.35	10.40	10.46	10.51	Temperature Coefficient of Voc	-0.276%/K
NOCT:Irradiance 800W/m² Ambien	t Temperature	20°C Wind	at 1m/S AM1	5			Temperature Coefficient of Isc	+0.046%/K

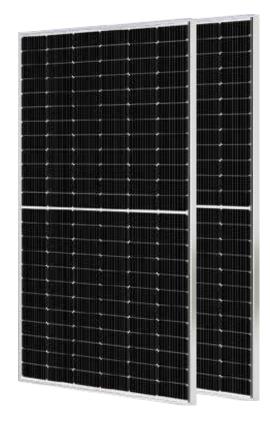
#### Characteristics

Current Voltage Curve MSD450P









## MSD540M-144

Mono Half-cut Single/Double Glass Module

525-550/MB Series



#### INTRODUCTION

MONO half-cut single / double glass module, assembled with multi-busbar PERC technique and half-cut structure, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

## LCOE save 6-8%



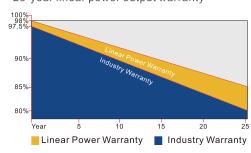






#### First-class Quality Assurance:

- 10-year warranty for material and technology
- 25-year linear power output warranty



#### Comprehensive Certificates:

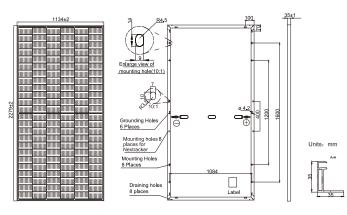
- IEC61215, IEC61730
- ISO9001:2015 Quality management systems
- ISO45001:Environmental management systems
- ISO45001:2018 Occupational health and safety management systems







#### **Mechanical Diagrams**



#### **Specifications**

Solar Cell(Type/Size	) MONO(182mm)
Solar Cells Number	144pcs(6*24)
Dimensions	2279×1134×35mm
Weight	28.5Kg/Pcs
Structure	3.2 Glass + EVA film + Back
Frame	Anodized Aluminum Alloy
Junction Box	IP68 \ 3*Bypass Diode
Cable Cross Section Size	4.0mm²,(+)300mm/(-)400mm
Mechanical Load	Front 5400Pa/Back 2400Pa
Packing Number	31Pcs/Pallet
Packing Volume	3.372Cbm/Pallet
40'HQ Container	620Pcs

PS:Frame color and cable length can be customized

electrical	Parameters at S	IC

Module Type	MSD525P	MSD530P	MSD535P	MSD540P	MSD545P	MSD550P		
Rate Maximum Power( Pmax/W)	525	530	535	540	545	550		
Module Efficiency(%)	20.30	20.50	20.70	20.90	21.10	21.30		
Open Circuit Volatge(Voc/V)	48.95	49.15	49.35	49.55	49.75	49.95		
Short Circuit Current(Isc/A)	13.67	13.74	13.82	13.89	13.97	14.05		
Voltage at Pmax(Vmp/V)	41.10	41.27	41.45	41.62	41.80	41.97		
Current at Pmax(Imp/A)	12.78	12.85	12.91	12.98	13.05	13.11		
Power Tolerance	0~+5w							
Temperature Coefficent of Isc	+0.046%°C							

Temperature Coefficent of Voc -0.276%°C Temperature Coefficent of Pmax -0.350%°C

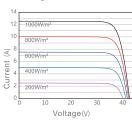
Irradiance 1000W/m2 Cell Temperature 25°C AM1.5

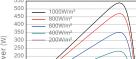
Remark: Electrical data in this catalogue does not refer to a single module, and it's not part of the offer. It only serves for the comparison among different module types.

Electrical Parameters at NOCT Operating Conditions								
Module Type	MSD525P	MSD530P	MSD535P	MSD540P	MSD545P	MSD550P	Operating Temperature	-40~+85°C
Rate Maximum Power( Pmax/W)	396	400	404	407	411	414	Maximum System Voltage	1500VDC
Open Circuit Voltage(Voc.V)	46.00	46.13	46.26	46.38	46.50	46.63	NOCT	45±2°C
Short Circuit Current(Isc/A))	10.95	10.99	11.03	11.08	11.12	11.17	Fireproof Performance	Glass C
Voltage at Pmax(Vmp/V)	38.35	38.55	38.76	38.95	39.16	39.31	Maximum Series Fuse	25A
Currrnt at Pmax(Imp/A)	10.33	10.38	10.43	10.46	10.50	10.53	Temperature Coefficient of Voc	-0.276%/K
NOCT:Irradiance 800W/m² Ambien	t Temperatur	e 20°C Wind	at 1m/S AMI	5			Temperature Coefficient of Isc	+0.046%/K

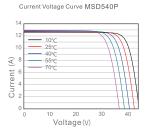
#### Characteristics

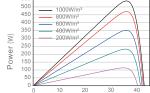
Current Voltage Curve MSD540P





Power Voltage Curve MSD540P





Voltage(V)

# "Mission:

# **Absorbing Sunshine Focusing Energy**

Returning the earth to a clean place ""



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