

# ROICHT@\_GLSERIES PORTABLE SOLAR FOLDING BOX



## What is portable solar folding box?

Solar folding box is a portable folding solar panel with high-efficiency solar cells can generate maximum power in a fixed area; With aluminum frame and support bracket, it is convenient for users to use and carry, you only need to plug and play; The solar folding box can directly charge the battery, and can also charge various mobile devices such as mobile phones, tablet computers and digital cameras through USB output.



# Roicht@\_GL Series Portable Solar Folding Box

Portable Folding Solar Panel

Highest Efficiency Monocrystalline Solar Kit

## ELECTRICAL PARAMETER

100W (2×50)

200W (2×100)

300W (2×150)



(1.5m cable)



(5m cable)

## MAIN FEATURES

### High efficiency

- ▶ The cell conversion rate is up to 23%, power drop caused by shadow can be greatly reduced.

### Easy transport

- ▶ Equipped with aluminum frame and support bracket that is easy to transport and carry.

### Versatile

- ▶ Can be used as picnic table for outdoor activities like camping, BBQ and fishing, etc.

### Quality warranty

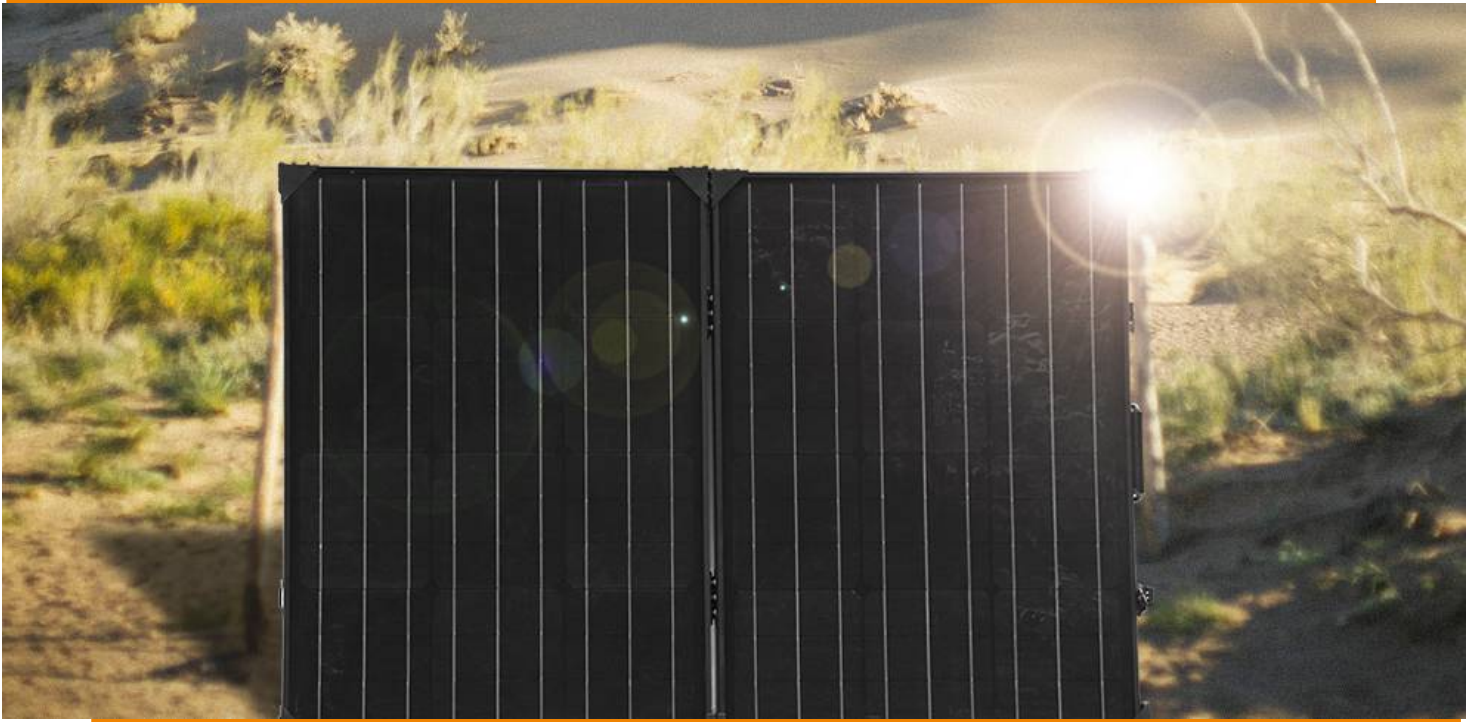
- ▶ Certified by international recognition like FCC, CE and ISO to ensure high quality; the service life up to 25 years.

### Well waterproof

- ▶ With IP65 junction box and corrosion-resistant aluminum frame, can better withstand rainfall.



## APPLICATION SCENARIOS



This solar folding box is a perfect portable solar system, which can be charged anytime and anywhere. It can provide mobile power for vehicles such as RVs, yachts, trucks, golf carts and boats, and small power for mobile devices such as mobile phones and tablet notebooks Especially suitable for camping, picnic, outing and other outdoor activities. Portable design escorts your power supply.

**Shenzhen Solarparts Inc.** takes technology as the driving force to empower the traditional manufacturing industry. Our products cover mono solar panels, poly solar panels, household power generation systems, small power supplies and solar chargers,etc. We also provide OEM and ODM services that comprehensively meet the personalized needs of customers.

\* Light-weight / Foldable design / customizable.

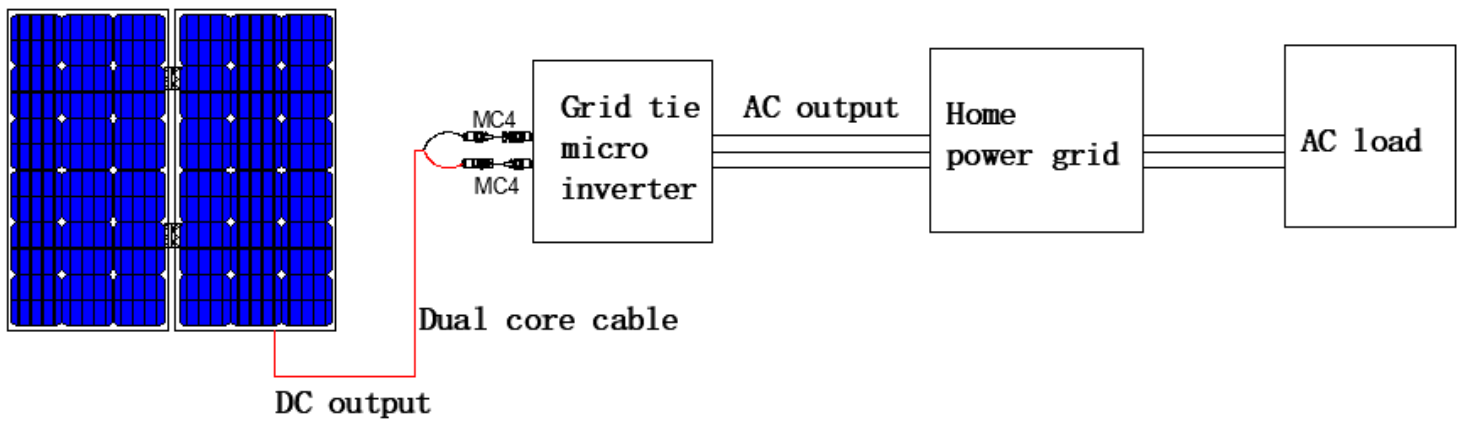
**PORTABLE SOLAR FOLDING BOX**

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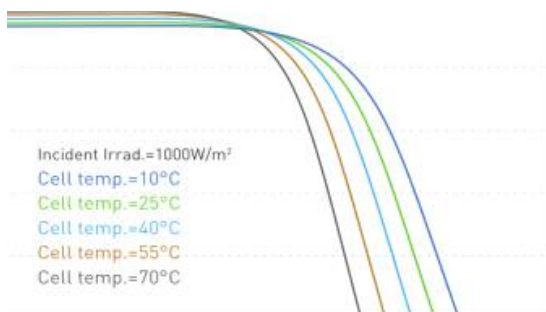
**Electrical parameter**

Rated Power	Pmax(W)	100 (2×50)	200 (2×100)	300 (2×150)
Color	/	black	Black/silver	black
Operating Voltage	Vmp(V)	18	19.8	19.8
Operating Current	Imp(A)	5.56	10.1	15.15
Open Circuit Voltage	Voc(V)	20.6	23.76	23.76
Short Circuit Current	Isc(A)	6.11	11.1	16.67
Boundary dimension	mm	680×510×25	1050×530×25	1140×700×25

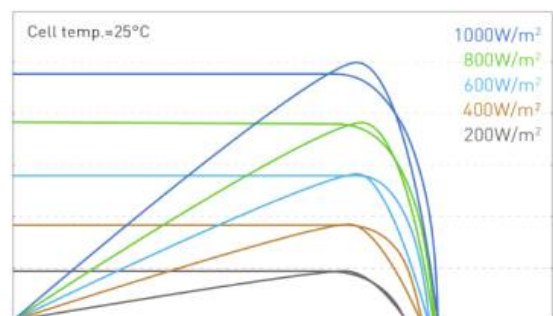
**Electrical connection diagram**



Output of different illumination intensity :



Output of different temperature:



\* Standard test conditions measured values (irradiance 1000 W/m2, cell temperature 25 °C, atmospheric mass AM1.5.

**BILL OF MATERIALS**

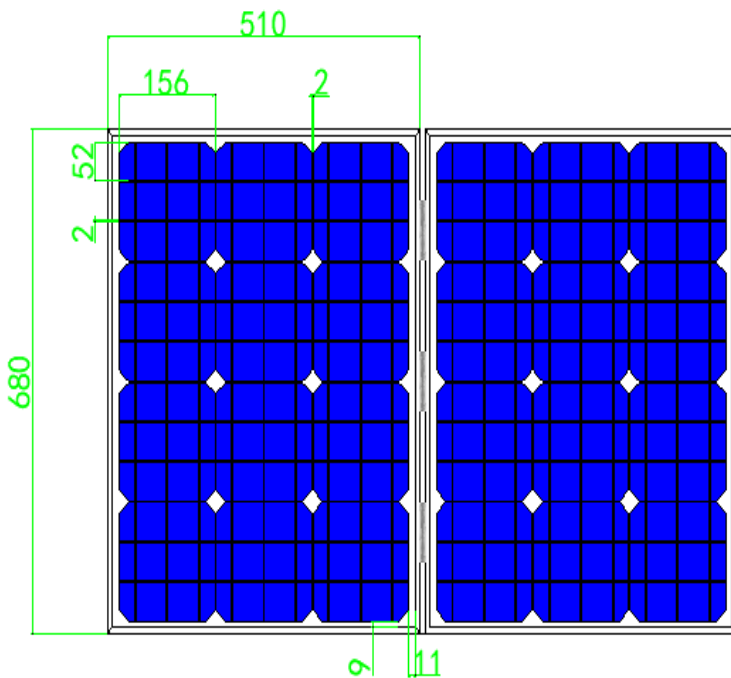
Green: 150W / 300W

Silver: 300W

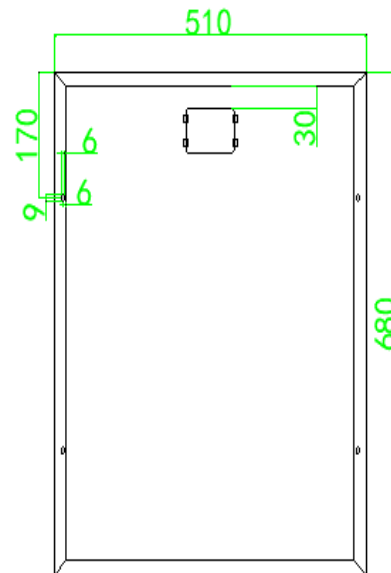
Eg: Black frame 2 × 50W

Type	Specifcation	Quantity
Solar panel	50W/18V 680*510*25mm	2
Grid tie micro inverter	180W/230V	1
stents	Black aluminum alloy frame	1
Cable	Brown/Blue/Green three colar cable, 3*0.75mm <sup>2</sup> , 5M, with Ohmmeter plug and Waterproof plug	1

**50W STRUCTURAL DRAWING**



Front view



反面图  
Back side



侧面图  
Side

\* Light-weight / Foldable design / customizable.

## 50W Solar panel:

Electrical parameter) | STC

Rated Power	Pmax(W)	50W
Operating Voltage	Vmp(V)	18V
Operating Current	Imp(A)	2.78A
Open Circuit Voltage	Voc(V)	20.6V
Short Circuit Current	Isc(A)	3.06A
Module Efficiency	(%)	18.67%
Performance Tolerance	(%)	±5%

### Structural performance:

solar cell	156*52 monocrystalline silicon PERC High efficiency solar cells
Connections of cells	13 (3x4 )
Weight	7.5Kg
Mechanical Dimension	680*510*25*20mm
Number of Mounting holes	4
waterproofing grade of Junction Box	IP67
Cable	16AWG red and black double core cabl
Connector	MC4

### Temperature characteristics:

NOTC(Standard Test Conditions)	45±2°C
(Isc( Short Circuit Current Temp.)	+0.050%/°C
Voc( Open Circuit Voltage Temp.)	-0.30%/°C
Pmax (Max. Power Temp.)	-0.39%/°C
Operating Temperature	-40~+85°C
Max.System Voltage	1000V DC
Maximum diode current	10A

\* Light-weight / Foldable design / customizable.

**PORTABLE SOLAR FOLDING BOX**

**BILL OF MATERIALS**

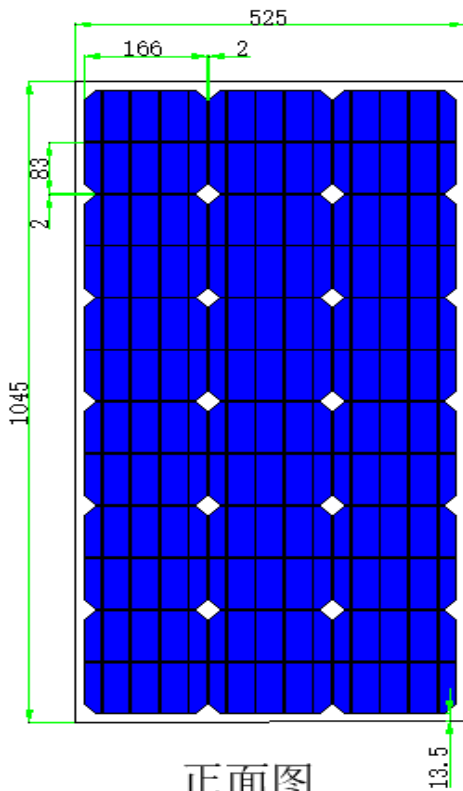
Green: 150W / 300W

Silver: 300W

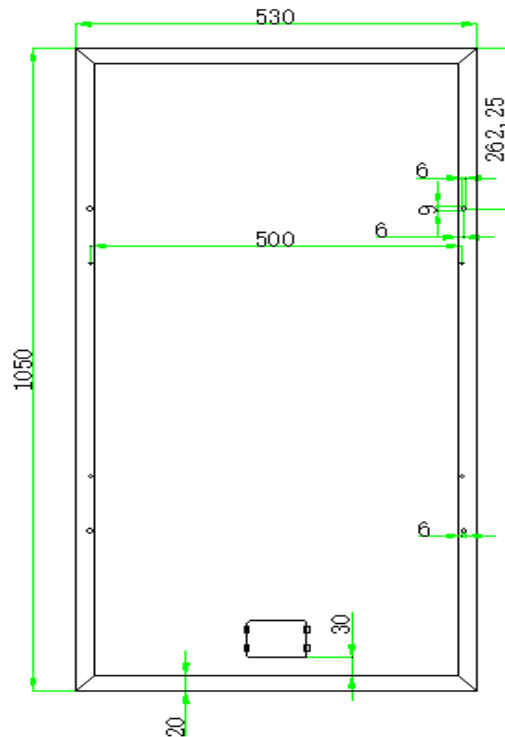
Eg: Black frame 2 × 100W

Type	Specifcation	Quantity
Solar panel	100W/19.8V 1050*530*25mm	2
Grid tie micro inverter	300W/230V	1
stents	Black aluminum alloy frame	1
Cable	Brown/Blue/Green three colar cable, 3*0.75mm <sup>2</sup> , (5/1.5M), with Ohmmeter plug and Waterproof plug	1

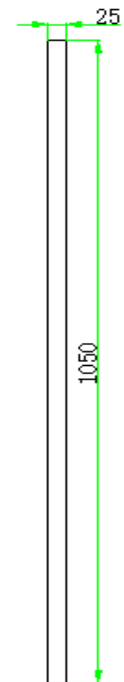
**100W STRUCTURAL DRAWING**



正面图  
Front Side



反面图  
Back side



侧面图  
Side

\* Light-weight / Foldable design / customizable.

**PORTABLE SOLAR FOLDING BOX**

## 100W Solar panel:

Electrical parameter) | STC

Rated Power	Pmax(W)	100W
Operating Voltage	Vmp(V)	19.8V
Operating Current	Imp(A)	5.05A
Open Circuit Voltage	Voc(V)	23.76V
Short Circuit Current	Isc(A)	5.56A
Module Efficiency	(%)	18.67%
Performance Tolerance	(%)	±5%

### Structural performance:

solar cell	166×83 monocrystalline silicon PERC High efficiency solar cells
Connections of cells	18 (3x6 )
Weight	7.5Kg
Mechanical Dimension	1050*530*25*20mm
Number of Mounting holes	4
waterproofing grade of Junction Box	IP67
Cable	12AWG/16AWG red and black double core cabl
Connector	MC4

### Temperature characteristics:

NOTC(Standard Test Conditions)	45±2°C
(Isc( Short Circuit Current Temp.)	+0.050%/°C
Voc( Open Circuit Voltage Temp.)	-0.30%/°C
Pmax (Max. Power Temp.)	-0.39%/°C
Operating Temperature	-40~+85°C
Max.System Voltage	1000V DC
Maximum diode current	10A

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**PORTABLE SOLAR FOLDING BOX**



**BILL OF MATERIALS**

Green: 150W / 300W

Silver: 300W

Eg: Black frame 2 × 150W

Type	Specifcation	Quantity
Solar panel	150W/19.8V 1140*700*25mm	2
Grid tie micro inverter	300W/230V	1
stents	Black aluminum alloy frame	1
Cable	Brown/Blue/Green three colar cable, 3*0.75mm <sup>2</sup> , (5/1.5M), with Ohmmeter plug and Waterproof plug	1

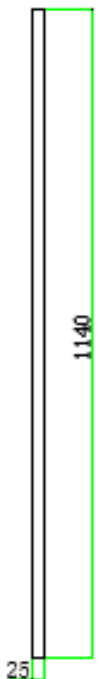
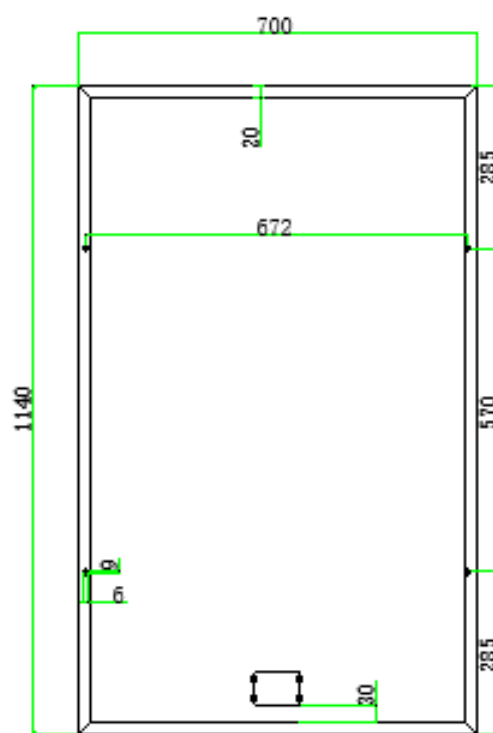
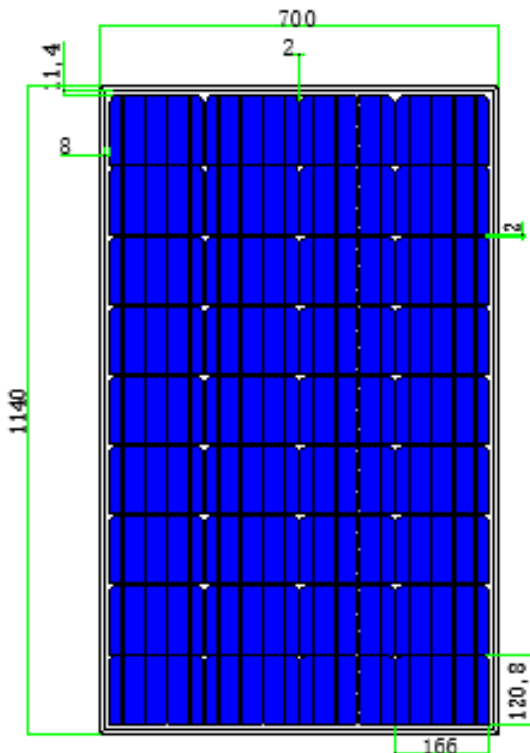
**150W STRUCTURAL DRAWING**



正面图

反面图

侧面图



\* Light-weight / Foldable design / customizable.

**PORTABLE SOLAR FOLDING BOX**

## 150W Solar panel:

Electrical parameter) | STC

Rated Power	Pmax(W)	150W
Operating Voltage	Vmp(V)	19.8V
Operating Current	Imp(A)	7.58A
Open Circuit Voltage	Voc(V)	23.76V
Short Circuit Current	Isc(A)	8.33A
Module Efficiency	(%)	18.67%
Performance Tolerance	(%)	±5%

### Structural performance:

solar cell	166*120.8 monocrystalline silicon PERC High efficiency solar cells
Connections of cells	36(4x9 )
Weight	7.5Kg
Mechanical Dimension	1140*700*25*20mm
Number of Mounting holes	4
waterproofing grade of Junction Box	IP67
Cable	11AWG/14AWG red and black double core cabl
Connector	MC4

### Temperature characteristics:

NOTC(Standard Test Conditions)	45±2°C
(Isc( Short Circuit Current Temp.)	+0.050%/°C
Voc( Open Circuit Voltage Temp.)	-0.30%/°C
Pmax (Max. Power Temp.)	-0.39%/°C
Operating Temperature	-40~+85°C
Max.System Voltage	1000V DC
Maximum diode current	10A

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**PORTABLE SOLAR FOLDING BOX**

**BILL OF MATERIALS**

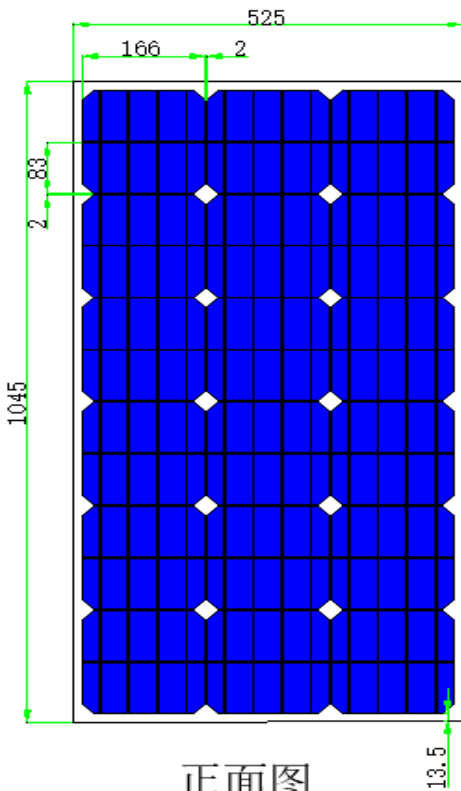
Green: 150W / 300W

Silver: 300W

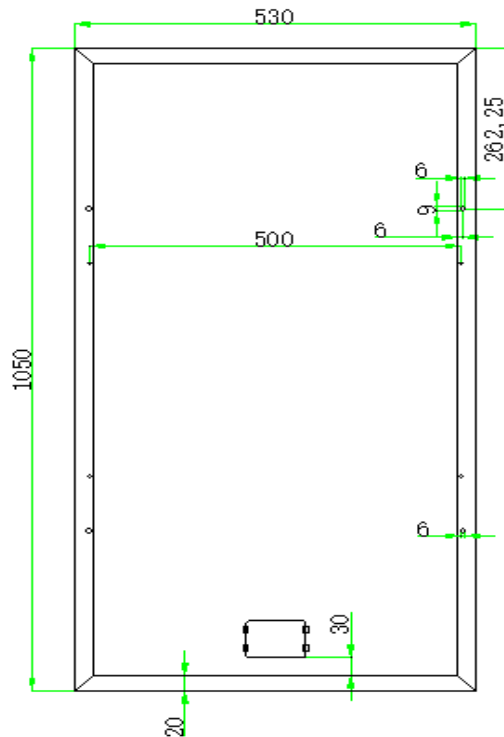
Eg: Silver frame 2 × 100W

Type	Specifcation	Quantity
Solar panel	100W/19.8V 1050*530*25mm	2
Grid tie micro inverter	300W/230V	1
stents	Silver aluminum alloy frame	1
Cable	Brown/Blue/Green three colar cable, 3*0.75mm <sup>2</sup> , (5/1.5M), with Ohmmeter plug and Waterproof plug	1

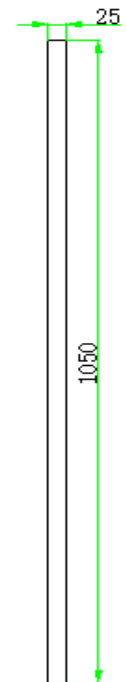
**100W STRUCTURAL DRAWING**



正面图  
Front Side



反面图  
Back side



侧面图  
Side

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**PORTABLE SOLAR FOLDING BOX**

## 100W Solar panel:

Electrical parameter) | STC

Rated Power	Pmax(W)	100W
Operating Voltage	Vmp(V)	19.8V
Operating Current	Imp(A)	5.05A
Open Circuit Voltage	Voc(V)	23.76V
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### Structural performance:

solar cell	166×83 monocrystalline silicon PERC High efficiency solar cells
Connections of cells	18 (3x6 )
Weight	7.5Kg
Mechanical Dimension	1050*530*25*20mm
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Operating Temperature	-40~+85°C
Max.System Voltage	1000V DC
Maximum diode current	10A

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**PORTABLE SOLAR FOLDING BOX**

# GREEN DATASHEET



Grid tie micro inverter:

Rated Power	GMI120-180 L Series	GMI260-350 Series
Model	GMI180	GMI300
Input Data(DC,PV)		
MPPT Voltage Range	12.5V-25V	24V-40V
Operation Voltage Range	10.8V-30V	18V-50V
Maximum Input Voltage	30V	50V
Startup Voltage	10.8V	18V
Maximum Input Power	180W	300W
Maximum Input Current	11.25A	12A
Output Data (AC)		

Single-Phase Grid Type	230V	230V
Rated Output Power	150W	280W
Maximum Output Power	160W	300W
Nominal Output Current	0.65A	1.21A
Nominal Output Voltage	230V AC	230V AC
Default Output Voltage Range	180V-280V	180V-280V
Nominal Output Frequency	50Hz / 60Hz	50Hz / 60Hz
Default Output Frequency Range	@50Hz : 47.5Hz-52.5Hz / @60Hz : 57.5Hz-62.5Hz	@50Hz : 47.5Hz-52.5Hz / @60Hz : 57.5Hz-62.5Hz
Power Factor	>0.99	>0.99
Total Harmonic Distortion	THD <5%	THD <5%
Efficiency		
Peak Efficiency	92.5%	92.5%

\* Light-weight / Foldable design / customizable.

**PORTABLE SOLAR FOLDING BOX**

# SILVER DATASHEET



Grid tie micro inverter:

Item	WVC-300(Wireless) -230VAC
Maximum input power	300W
Recommend the use of PV modules	300W/Vmp>34V/Voc<50V
Maximum input DC voltage	50V
Peak power tracking voltage	25-40V
Operating Voltage Range	17-50V
Min / Max start voltage	22-50V
Maximum DC short current	20A
Maximum Input Current	15A
Output Data	@230VAC

Peak power output	300Watt
Rated output power	280Watt
Rated output power	1.36A
Rated voltage range	180-260VAC
Rated frequency range	47-52.5Hz
Power factor	>98%
Maximum units per branch circuit	10PCS (Single-phase)
Output Efficiency	@230VAC
Static MPPT efficiency	99.5%
Maximum output efficiency	93%
The average efficiency	91%
Night time power consumption	<70mW Max
THD	<5%

\* Light-weight / Foldable design / customizable.

**PORTABLE SOLAR FOLDING BOX**

# SILVER DATASHEET



Grid tie micro inverter:

## Exterior

Ambient temperature	-40°C to +60°C
Operating temperature range (inverter inside)	-40°C to +82°C
Dimensions (WxHxD)	289mm × 200mm × 38mm
Weight	1.6kg
Waterproof Rating	IP65
Cooling	Self-cooling

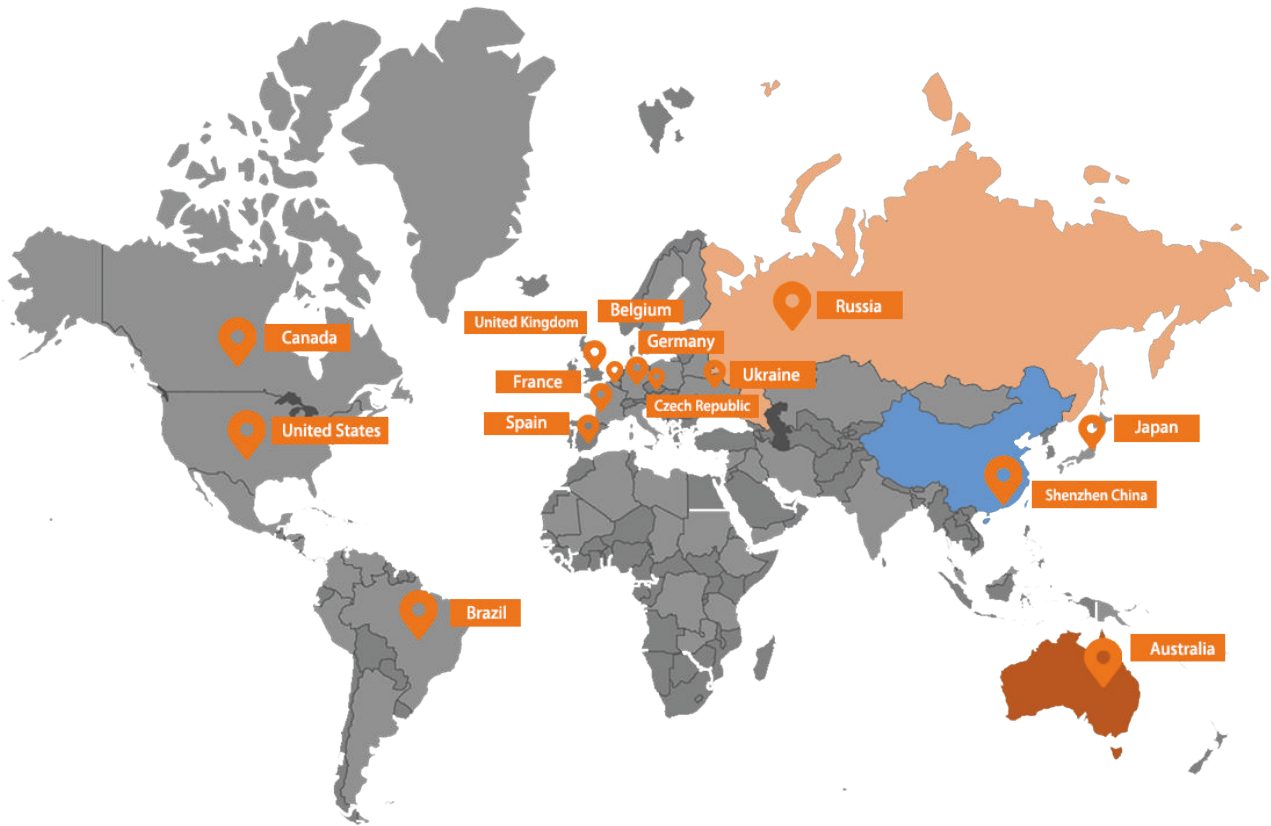
## Feature

Communication Mode	Wireless Communication 433/462MHz
Power transmission mode	Reverse transfer load priority
Monitoring System	Lifetime free
Electromagnetic compatibility	EN50081.part1 EN50082.part1
Grid disturbance	EN61000-3-2 Safety EN62109
Grid detection	DIN VDE 1026 UL1741
Certificate	CEC,CE National patent technology

\* Light-weight / Foldable design / customizable.

**PORTABLE SOLAR FOLDING BOX**

## Global Markets Distribution



Contact us:

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