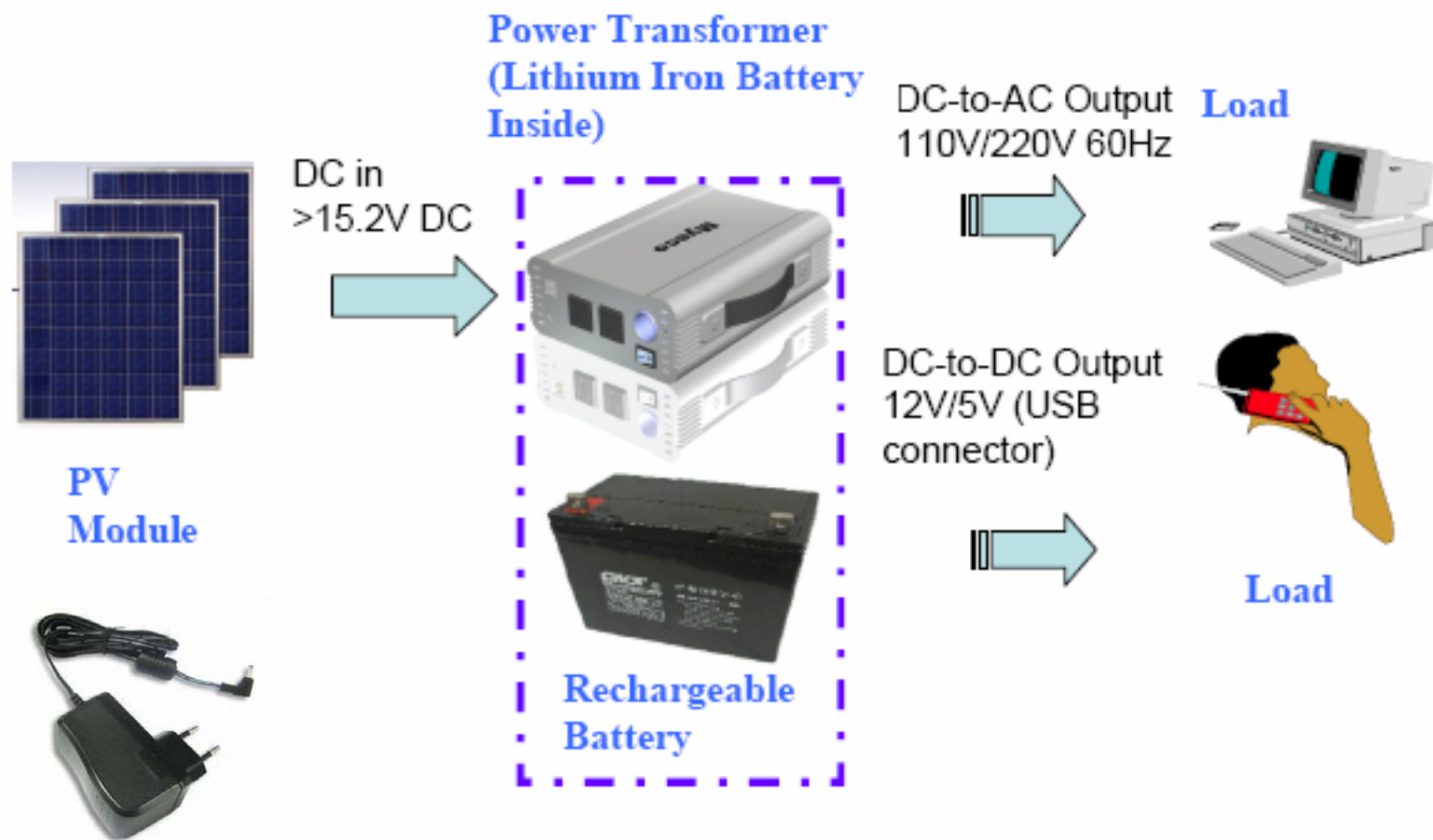


## Small Solar Home System : DIY type of small solar power system

- ☆ For camping & caravan system
- ☆ For rural area where grid-supplied electricity is unavailable
- ☆ Power supply for emergency while power failure



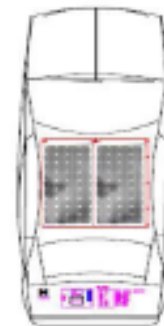
**Adapter (Optional)**

### v Main Function

- \* Collect solar power to charge the Lithium iron battery
- \* Provide AC110V/220V,12V/USB 5V Power Socket
- \* Prevent from battery over-charging and over-discharging

### v Feature

- \*High performance charging, inverter, multi-power socket
- \* Rechargeable Lithium iron battery inside
- \* Easy to install/un-install
- \* Small,light weight, easy to carry
- \* Home-use charging adaptor for cloudy and rainy day (optional)
- \* Various PV module available



# Small Solar Home System SPEC

## [ Charging Specification ]

Item	Specification
Solar Voltage	>15.2V
Solar Charging Current	0~5A
Max. Charging Efficiency	>95%
Protection	Over Voltage/ Over Current
Max. Solar Module Support	Up to 125W(Cell numbers>30)

## [ Discharging Specification ]

Item	Specification
Discharging Voltage of Batteries	13.2V
Output Wave Form	Modified Sine Wave
Max. Output Power	150W
AC Output Voltage	110V/220V AC Socket *1
DC Output Voltage 1	12V Terminal *1
DC Output Voltage 2	5V USB *1
Battery	10AH@13.2V



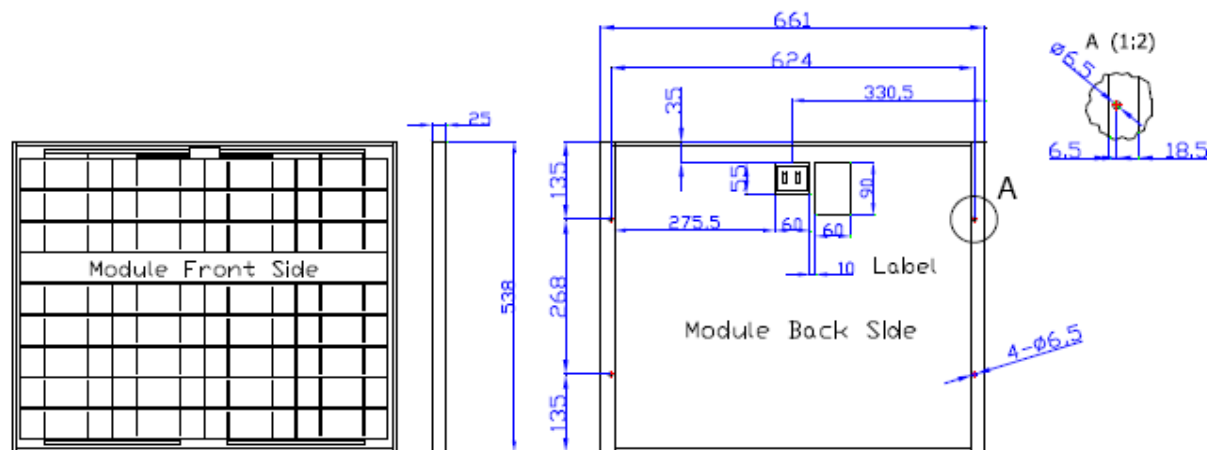
## [ Weight & Dimension ]

Item	Specification
Weight	3.5Kg
Size	320*180*60 mm

Solar Module: MyECO PM45X Series  
 (PM40x/PM45x, 6j Polycrystalline Solar Cell, 1/3sized, 4x9pcs)



Technical Drawing



Product Characteristics

Electrical Characteristics: Performance at STC\*1

Model Type	PM40	PM45		
Nominal Peak Power, Pmax	40W $\pm$ 5%	45W $\pm$ 5%		
Peak Power Voltage, Vpm	17.48 V	18.12 V		
Peak Power Current, Ipm	2.34 A	2.44 A		
Open Circuit Voltage, Voc	21.56 V	21.33 V		
Short Circuit Current, Isc	2.53 A	2.60 A		
Module Efficiency	11.25%	12.65%		

\*STC: Standard Test Condition, 1000W/m2, AM 1.5, 25°C

#### Component materials

Cell Qty per Module	1/3-sized 36pcs
Cell Type	Polycrystalline Silicon
Cell Dimensions	52 x 156mm
Laminate Construction	Front: Tempered Glass Encapsulation: Solar Cells Embedded in EVA (Ethylene-Vinyl-Acetate) Rear: Tedlar
Glass	Low-Iron Tempered Glass, 3.2mm
Junction Box	IP65 Junction Box
Frame	Anodized Aluminum Frame. Color: Silver

#### Physical Specifications

Dimension [L x W x H]	661 x 538 x 25 mm
Weight (Kg)	5 Kg

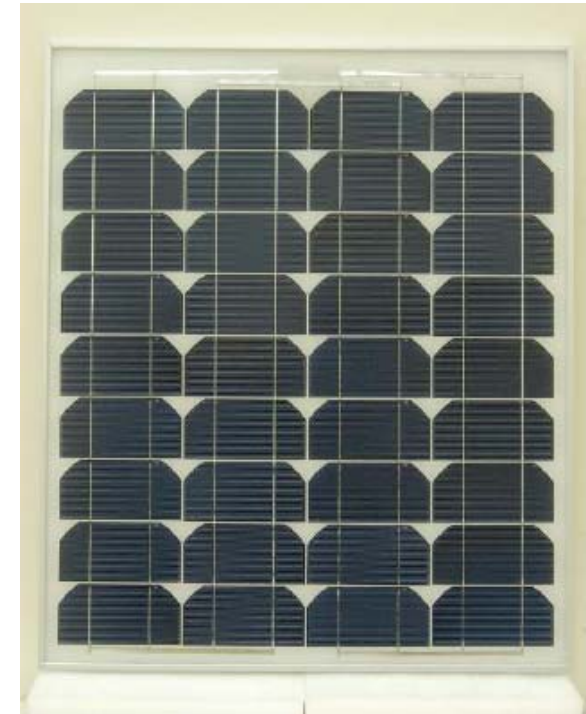
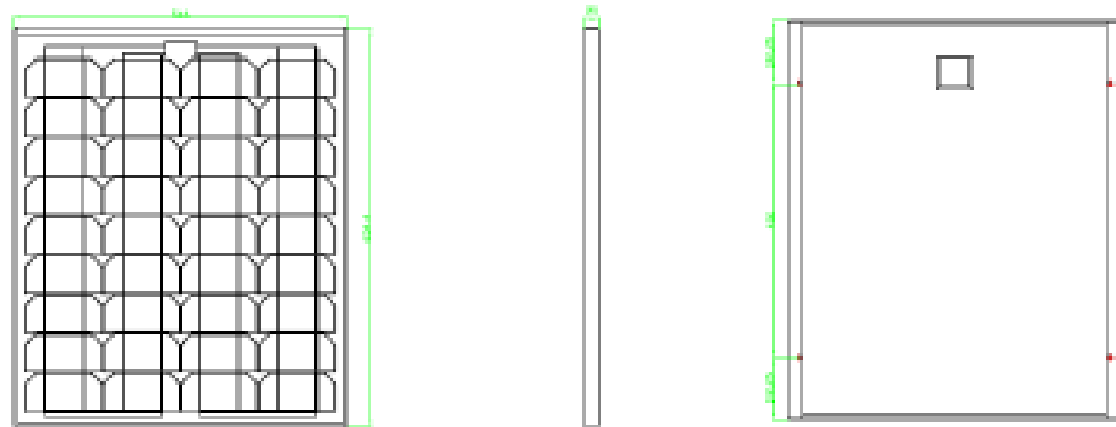
#### Performance Warranty

90% Output	10Years
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#### Quality Assurance

Quality Management	ISO 9001:2000 certified
IEC 61215:2005	TUV certified
EN 61730-1 & EN 61730-2:2007	TUV certified
1. Electrical Insulation Test	
2. Outdoor Exposure Test	
3. Hot-Spot Endurance Test	
4. UV-exposure	
5. Thermal Cycling Test	
6. Humidity Freeze Test	
7. Damp Heat Test	
8. Robustness of Terminations Test	
9. Wet Leakage Current Test	
10. Mechanical Load Test	
11. Hail Impact Test	
12. Bypass Diode Thermal Test	

Technical Drawing  
MM40 Series



## Product Characteristics

### MM40 Series

Electrical Characteristics: Performance at STC\*1

Model Type	<b>MM40</b>
Nominal Peak Power, Pmax	<b>40W ± 5%</b>
Peak Power Voltage, Vpm	<b>17.17 V</b>
Peak Power Current, Ipm	<b>2.27 A</b>
Open Circuit Voltage, Voc	<b>21.42 V</b>
Short Circuit Current, Isc	<b>2.56 A</b>
Module Efficiency	<b>10.60%</b>

\*STC: Standard Test Condition, 1000W/m<sup>2</sup>, AM 1.5, 25°C

#### Component materials

##### MM40 Series

Cell Qty per Module	36pcs of 1/2 Solar Cell
Cell Type	Mono-crystalline Silicon
Cell Dimensions	1/2 125 x 125mm
Laminate Construction	Front: Tempered Glass Encapsulation: Solar Cells Embedded in EVA (Ethylene-Vinyl-Acetate) Rear: Tedlar
Glass	Low-Iron Tempered Glass

#### Physical Specifications

##### MM40 Series

Dimension [L x W x H]	654.4 x 546 x 25 mm (25.7 x 21.4 x 0.98 in)
Weight (Kg)	5 Kg

#### Features:

The most reliable quality

Good conversion efficiency of solar module

Effectively minimize the power drop by the shade

High-level protection for severe environment

High quality glass provides for less reflection of incoming sunrays

Color of the back sheet: White & Black (custom-made possible)

Made in Taiwan

**Product (Picture)**

**Dimensions (Draft)**



**Unfold Type 1**



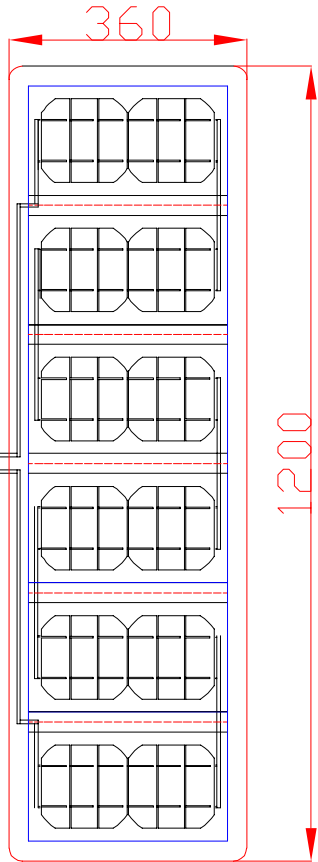
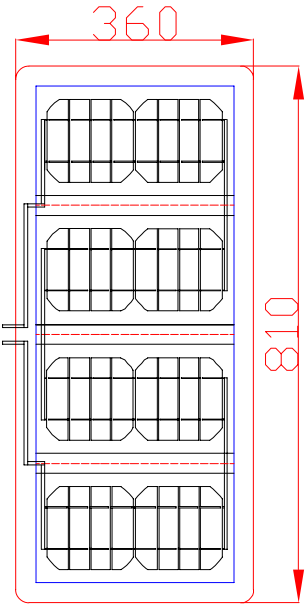
**Unfold Type 2**



**Fold**

**MF20**

**MF30**

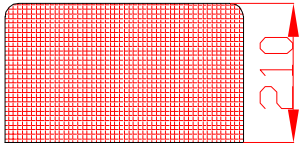
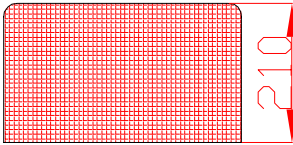


Unfold Dim.

fold Dim.

Unfold Dim.

fold Dim.



**1.Model name:MF30/MF20**

**2.Dimensions Unfold/Fold:**

**MF30 LxWxH=360x1200x8mm/360x210x55mm**

**MF20 LxWxH=360x810x8mm/360x210x35mm**

**3.Main Material**

**A.5” mono-crystalline cell**

**(MF30 1/3cell 4x9=36cells MF20 1/4cell 4x9=36cells )**

**B.Glass. Thickness=2mm(Heat Strengthened)**

**C.Mitsui– Solar EVA (TUV certification material)**

**D.Madico Backsheet (TUV certification material)**

**E.Without JB/with DC power Plug**

**4.Electrical characteristics**

**$P_{max}=(MF30) 28\sim 30W\pm 10\%$  /(MF20) 18~20W±10%**

**$V_{oc}=\sim 21.6V$**

**$V_{mp}=\sim 18V$**

**$I_{sc}=(MF30) \sim 1.66A$  (MF20) ~1.25A**

**$I_{mp}=(MF30) \sim 1.52A$  (MF20) ~1.18A**