

## 250W FLEXIBLE CIGS THIN FILM SOLAR PANELS



### Quick Details

Place of Origin: Shenzhen, China (Mainland)

Brand Name: Macsun Solar

Model Number: MS-FLEX-TSP250

Type: CIGS Thin Film Solar Module

Max. Power: 250W

Size: 5745\* 494\*3.5mm

Working condition: Sunny, Cloudy, or even Rainy days

Special Feature: Good performance in diffuse light or low-lux condition

### Designed specially for rooftops

#### Integrates with roofing surface

No mounting hardware

No roof penetrations

No wind load

Low profile

### **Flexible module**

Fits many roof types

Durable, non-breakable

### **Light weight**

3.6 kg/m<sup>2</sup> (0.74 lb/ft<sup>2</sup>) with adhesive

### **High performance**

Performs in all light conditions

Shade tolerant

Shade protected, continues to charge when part of the cells are in a shadow

### **Covers entire roof area**

Lays flat, no tilt required

Minimum module spacing required



## **APPLICATION**

- Directly onto metal Standing-Seam roofs
- Roof membranes
- Roofs rated at less than 5-10kg/m<sup>2</sup> additional load
- Curved roof / architectural structures
- Mobile applications - RVs, Trucks
- Landfills
- Larger Mobile applications - Boats, Containers
- Tensioned-Fabric structures
- Corrugated roofs rated at 7-10kg/m<sup>2</sup>
- Elastomeric Coated Roofs
- Poles and Towers
- Architectural glass
- Larger Shingles

## Electrical Specifications

Capacity rating	Pmax	250 W
Tolerance of Pmax	%	+10 / -7%
Module aperture area efficiency	%	11.5%
Rated voltage	Vmpp	48.6 V
Rated current	Imp	5.1 A
Open circuit voltage	Voc	65.4 V
Short circuit current	Isc	6.2 A

## ◇ Mechanical Specifications

Dimensions	5745 x 494 x <3 mm (226 x 19.4 x <0.12 in)
Weight	7.2 kg without adhesive (2.5 kg/m <sup>2</sup> ) 9.3 kg with adhesive (3.3 kg/m <sup>2</sup> )
Junction Box - Top Mounted	TE Connectivity SOLARLOK™ Micro Junction Box
Cables	4 mm <sup>2</sup> dual rated with SOLARLOK™ connectors
Junction Box - Bottom Mounted	MC-JM/FM (MC4 Connectors)
Front Sheet	Non-stick ETFE
Solar Cells	108 CIGS cells (210 x 100 mm)
Adhesive	ADCO HelioBond™ PVA 600BT butyl mastic
Hot Spot Protection	Bypass diodes at each cell; 1 at junction box
Materials	Lead free and exempt from RoHS requirements
Maximum Series Fuse Rating	10 Amp
Color Options	Black (B) or White (W) backsheet behind cells

## ◇ Operating Conditions

Temperature Range	-40°C to + 85°C
Maximum System Voltage	1000VDC IEC, 600VDC UL

◇ **Warranty**

Materials and workmanship - 25years

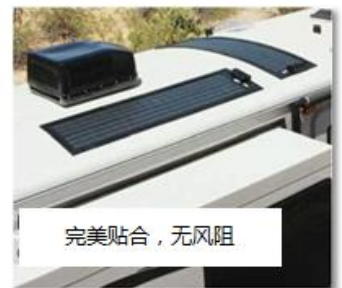
Power output - 25 years (90% @ 10 yrs; 80% @ 25 yrs) Limited Warranty

**Packaging & Delivery**

Packaging Details: Bags & Cartons according to your requirements

Delivery Detail: Shipped in 15 days after payment

**Applications:**



充分利用车顶面积

