### **MODEL: FLEX-03WL-1200W**

## **High Power Density in a Flexible Form Factor**

#### **KEY FEATURES:**

- Record efficiency levels in a CIGS flexible form factor
- Low installed weight at less than 2.0 kg/m2(<0.5 lb/ft2)</p>
- No penetrations, ballast or racking required
- Applicable for high wind load and high seismic hazard areas
- Bypass diodes reduce PV system shading losses
- Directly bonds to many approved surfaces

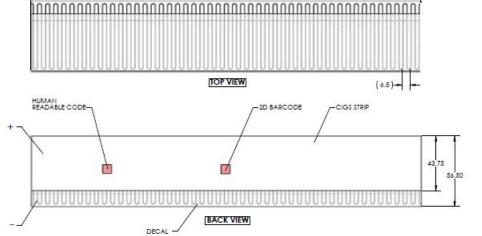
### RELIABILITY AND SAFETY

- · IEC 61646 & IEC 61730
- · UL 1703

### WARRANTY

- · 5 years workmanship
- · 5/10/25 years warranty against power loss

# CIGS SOLAR CELL



Thin-film CIGS solar cells on stainless steel substrate have high efficiency levels and provide significant advantages over conventional, rigid solar cells.

#### Cell Features:

- · Efficiency level of up to 16.5% in a fl exible form factor.
- · Thin 0.33mm
- · Lightweight 7.5 gm
- · Ideal for many specialized uses. Versatile cell architecture means the size can be modified to suit various applications.
- · Bendable and shatter-proof

#### SINOLTECH COOPERTION WITH HANERGY:

SINOLTECH becomes authorized cooperator with Hanergy in year 2015.

Representing brand "Global Solar", "Miasole" and "Solibro" CIGS Modules in overseas market.

SINOLTECH keep regular stocks of Hanergy CIGS flex module and Solibro BIPV module.

Capable of prompt delivery within 5 working days.

SINOLTECH produce and represent High Quality Solar Products Only.

Our professional product knowledge, quick customer response, responsible after sale service will make your whole purchase process worry-free!

#### **MODEL: FLEX-03WL-1200W**

### **Electrical Specifications**

| Capacity rating                 | Pmax             | 1200 W    |
|---------------------------------|------------------|-----------|
| Tolerance of Pmax               | %                | +10 / -0% |
| Module aperture area efficiency | %                | 16.5%     |
| Maximum Power Voltage           | $V_{mpp}$        | 137.56 V  |
| Maximum Power Current           | I <sub>mpp</sub> | 8.72 A    |
| Open circuit voltage            | V <sub>oc</sub>  | 173.5 V   |
| Short circuit current           | I <sub>sc</sub>  | 25 A      |

Standard Test Conditions (STC): Cell Temperature at 25° C; Solar irradiance intensity of 1000 W/m2; AM1.5 solar reference spectrum (ASTM E892)

#### **Thermal Characteristics**

| NOCT  | [°C] | 48        |
|---|------|-----------|
| Temperature Coefficient of P <sub>MPP</sub> | Vmax | -0.38 %°C |
| Temperature Coefficient of ${ m V}_{ m OC}$ | Voc  | -0.28 %℃  |
| Temperature Coefficient of I <sub>SC</sub>  | Isc  | 0.008 %°C |

Note: Relative to Standard Test Conditions(STC): Solar irradiance intensity of 100W/m<sup>2</sup>; AM1.5 Solar reference spectrum (ASTM E892)

### Low-Light Performance

| Intensity             | Relative Efficiency |
|-----------------------|---------------------|
| 1000 W/m <sup>2</sup> | 100%                |
| 500 W/m <sup>2</sup>  | 99%                 |
| 200 W/m <sup>2</sup>  | 91%                 |

Note: Relative to Standard Test Conditions(STC): Cell Temperature at 25°C; AM1.5 solar reference spectrum(ASTM E892)

### **Mechanical Specifications**

| Model Numbers                        | FLEX-03WL-1200W                         |
|--------------------------------------|---|
| Length                               | 5910mm                                  |
| Width                                | 1292mm                                  |
| Thickness, Maximum at J-Box*         | 2.5mm (17mm including junction box)     |
| Weight(Module without adhesive)      | 13 kg                                   |
| Weight(Module with adhesive)         | 15 kg                                   |
| Weight/Area(Module without adhesive) | 1.6 kg/m2                               |
| Weight/Area(Module with adhesive)    | 1.9 kg/m2                               |
| Junction Box Type                    | IP68                                    |
| Cable connections                    | MC4 Compatible                          |
| Cell type                            | Copper Indium Gallium Diselenide (CIGS) |

# **Operating Conditions**

| Temperature range          | -40 to + 85 °C          |
|----------------------------|-------------------------|
| Maximum System Voltage     | 1000 VDC IEC, 600VDC UL |
| Maximum Series Fuse Rating | 10A                     |

## **Certifications and Warranty**

Certificates: EN 61646, EN 61730, UL 1703

Warranty: 5 years workmanship; (90% @10 yrs; 80% @ 25 yrs) Limited Guarantee

Package: 5 modules per crate, 40 modules per pallet, 320 modules per 20' ISO container, 640 modules per 40' ISO container

#### **Contact Us:**

SINOLTECH ENERGY LIMITED

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TEL: +86-15318807707

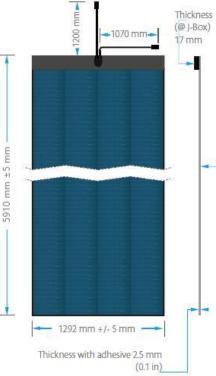
Address: A1-3-712, EAST 8 ENTERPRISE MANSION,

DESIGN & CREATIVE INDUSTRIAL AREA, JINAN, CHINA

POST CODE: 250100 Email: Susan@sinoltech.com

**SKYPE: Sinoltech** 

Website: www.sinoltech.com, www.sinolsolar.com



SINOLTECH®

Thickness without adhesive 1.6 mm (0.06 in)

