



# FLEXIBLE SOLAR PANELS

# CLM-100MF/CLM-105MF

## Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

### Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



Powerful



Weather Resistant

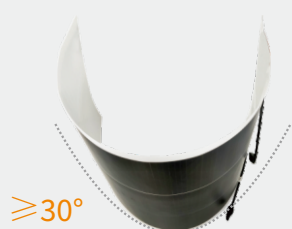
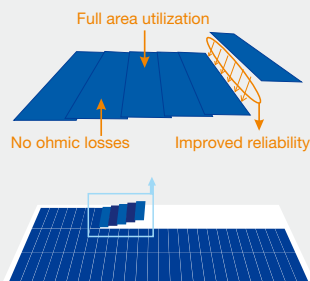
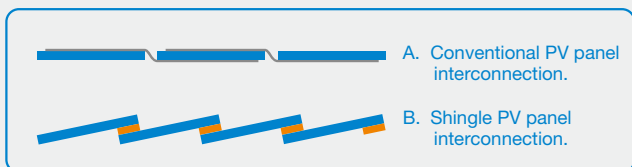


Flexible

### What Is Shingled Cells Technology Advantage?

Shingled-cell technology, by cutting cells., these smaller currents will help reduce "Cell To Module" loss, which means higher output and more flexible.

The innovative shingled-cell technology allows no ribbon soldering internally and smaller branch current, so that internal resistance is lower, and increase the efficiency of the modules. The unique parallel design reduces the hot-spot effect significantly, and the gorgeous aesthetic appearance will bring different visual enjoyment.



| Typical Electrical Data  |               |               |
|--|---------------|---------------|
| at STC: Irradiance 1000 W/m <sup>2</sup> module temperature 25°C AM=1.5; |               |               |
| Model  | CLM-100MF     | CLM-105MF     |
| Pmax (W)   | 100W          | 105W          |
| Power Tolerance  | 0 ~ +3%       | 0 ~ +3%       |
| Vmp (V)  | 18.43         | 18.61         |
| Imp (A)  | 5.47          | 5.65          |
| Voc (V)  | 22.33         | 22.51         |
| Isc (A)  | 5.79          | 5.97          |
| Working Temperature  | -40°C ~+ 85°C | -40°C ~+ 85°C |
| Nominal Operating cell Temp  | 45± 2°C       | 45± 2°C       |
| Temp coefficient of Pmax   | -0.4%/ °C     | -0.4%/ °C     |
| Temp coefficient of Voc  | -0.3 %/ °C    | -0.3 %/ °C    |
| Temp coefficient of Isc  | 0.06 %/ °C    | 0.06 %/ °C    |
| Temp coefficient of Vmpp   | -0.35 %/ °C   | -0.35 %/ °C   |
| Nominal Voltage  | 12V           | 12V           |
| Max. System Voltage  | 600VDC        | 600VDC        |
| Max. Fusing Current  | 15A           | 15A           |

| Mechanical Data                   |   |
|-----------------------------------|---|
| Cells Type                        | Prime Monocrystalline PERC solar cells                        |
| Module Dimensions(L/W/H)          | 1120*530mm  |
| Module weight                     | 1.5kg   |
| Cell's Efficiency                 | 21.3%      22.4%  |
| Front Cover (material/ thickness) | Higher Strength TPT/ETFE/ 2.2mm                               |
| Back Sheet (color)                | White/ Black  |
| Bending Range                     | ≥30°  |
| Junction Box (protection degree)  | ≥IP65/IP68 with by-pass diode                                 |
| Grommets                          | 316 stainless Steel /6 Mounting holes/ Square & Round corners |
| Cables & Connectors               | 0.5 m/2.5&4.0mm <sup>2</sup> /MC4 compatible/IP68             |