

FLEXIBLE SOLAR PANELS

CLM-180MF/CLM185MF

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 minimizes 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. ÷.



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 ² module temperature 25°C AM=1.5;			
Model	CLM-180MF	CLM-185MF	
Pmax (W)	180W	185W	
Power Tolerance	0~+3%	0 ~ +3%	
Vmp (V)	17.15	17.33	
Imp (A)	10.53	10.71	
Voc (V)	20.8	21	
lsc (A)	11.1	11.27	
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*1005		
Module weight	2.4kg		
Cell's Efficiency	20.4%	21.0%	
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&4.0mm²/MC4 compatible/IP68		



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