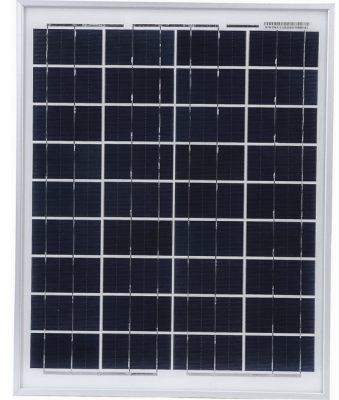


# CL-SM20P

## High Efficiency, High Quality PV Module



Electrical Characteristics	CL-SM20P
Maximum power (Pmax)	20W
Voltage at Pmax (Vmp)	18.2V
Current at Pmax (Imp)	1.12A
Open-circuit voltage (Voc)	22.6V
Short-circuit current (Isc)	1.18A
Temperature coefficient of Voc	$-(0.40 \pm 0.05)\% / ^\circ\text{C}$
Temperature coefficient of Isc	$(0.065 \pm 0.01)\% / ^\circ\text{C}$
Temperature coefficient of power	$-(0.5 \pm 0.05)\% / ^\circ\text{C}$
NOCT (Air 20°C; Sun 0.8kW/m² wind 1m/s)	47±2°C
Operating temperature	-40°C to 85°C
Maximum system voltage	600V DC
Power tolerance	+ 3%
Cells	multicrystalline silicon solar cell
No. of cells and connections	36(2X18)
Module Dimension	435mm[17.13in.]x356mm[14.02in.]x25mm[0.98in.]
Weight	2.1kg[4.62lbs]

\* STC: Irradiance 1000W/m², AM1.5 spectrum, module temperature 25°C  
 \* Specifications are subject to change without notice at any time.



### Key Features:

- High module efficiency and stable power output
- Based on leading process technology
- Outstanding electrical performance under high temperature conditions or low irradiance conditions
- Easy of installation and all-weather applications
- 5 years product warranty(materials and workmanship)
- 20 years module power output warranty
- Peak power of single module is guaranteed in +3% power tolerance
- Strong framed module, passing loaded test of 5400 Pa (IEC61215 2nd)
- The manufacture is certified for ISO 9001:2008

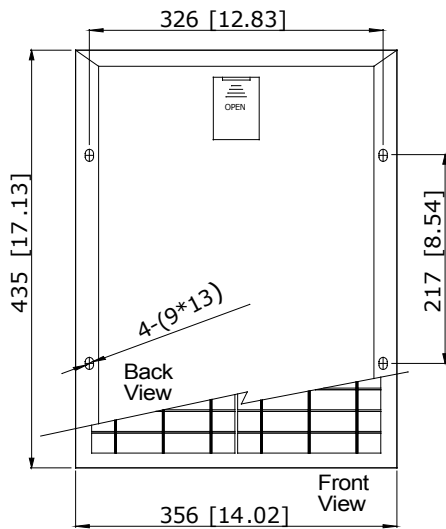
### Product's Guarantee

- 15 years module power output no less 90%
- 20 years module power output no less 80%

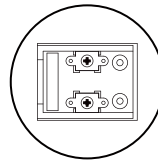
### Applications

- Off grid residential roof-tops
- Off grid commercial/industrial roof-tops
- Rural area applications
- Solar power system
- Other off-grid applications

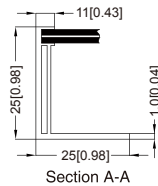
### Module Diagram



Dimensions in brackets are in inches.  
 Un-bracketed dimensions are in millimeters.  
 Unit:mm[in.]

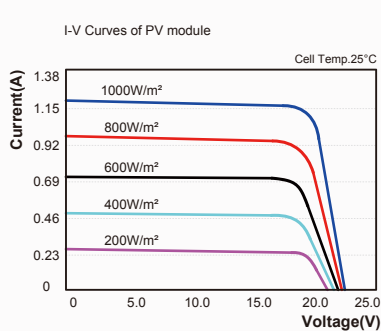


Junction Box  
 Top View (Lid open)

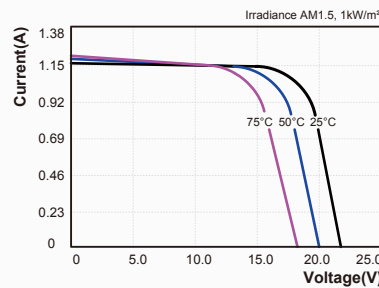


Section A-A

### I-V Curves



I-V Curves of PV module CL-SM20P at various cell temperatures



CELLEVIA POWER