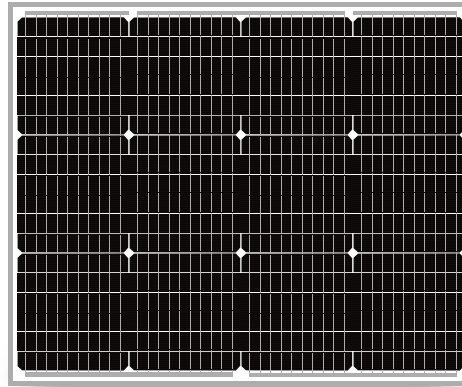


80W-90W

High Efficiency Monocrystalline PV Module

- Nominal 24V DC for standard output.
- Outstanding low-light performance.
- Heavy-duty anodized frames.
- High transparent low-iron, tempered glass.
- Designed to withstand high wind pressures, hail and heavy snow.
- Quality aesthetic appearance.



272637
CLASS I, DIVISION 2,
GROUPS A, B, C AND D



10 years

Product Warranty

25 years

Power Warranty



Industry Compliant

This CID2-rated solar panel is suitable for industries that are at risk of gas explosions, meeting NFPA and NEC safety standards



Enhanced Safety

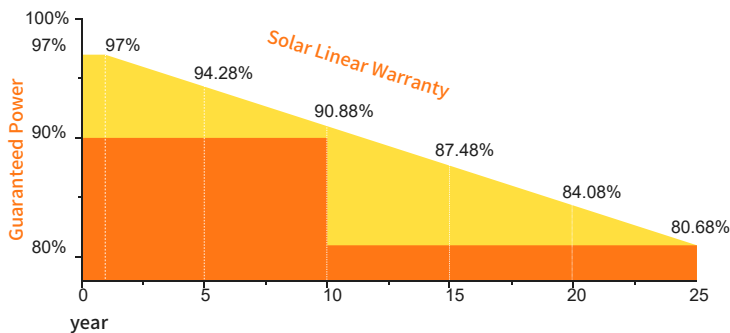
Equipped with specialized design elements, minimizing risk of ignition in hazardous environments, further adhering to CID2 certification standards



Mechanical Robustness & Reliability

Engineered for durability and reliability, capable of operating efficiently even in volatile and hazardous conditions, where safety and efficiency matter most

Performance Warranty



Wind Load/Snow Load:
2400pa/5400pa

Positive Power Tolerance :
0~+5W

Warranty Information :
5 Year Product Workmanship

Specifications

Cells	Monocrystalline silicon solar cell
No. of cells and connections	72(4x18)
Module dimension	24.80in.x30.12in.x1.38in. [630mmx765mmx35mm]
Weight	12.34lbs[5.60kg]

Rating Characteristics

Operating temperature	-40°C to 85°C
Maximum system voltage	600V/1000V DC
Power tolerance	0~± 3%
Module Fire Performance	Type 1 (for US)
Fire Resistance Rating	Class C (For Canada)
PV module application class	Class A
Temperature code rating	T3C

*NOCT:Nominal operating cell temperature (the data is only for reference)

Electrical Characteristics

80W-90W

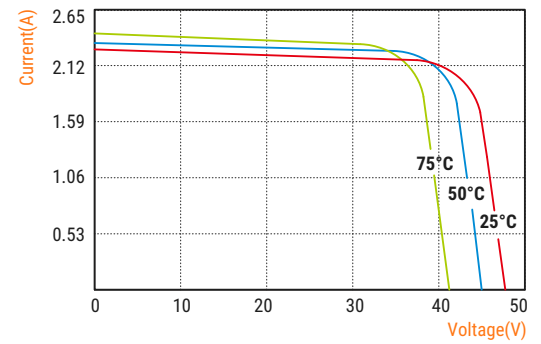
Module Type	ST-080Q-24CID2(-QC)	ST-085Q-24CID2(-QC)	ST-090Q-24CID2(-QC)
Maximum power (Pmax)	80W	85W	90W
Voltage at Pmax (Vmp)	40.17V	40.86V	41.94V
Current at Pmax (Imp)	1.99A	2.08A	2.15A
Open-circuit voltage (Voc)	46.88V	47.23V	47.69V
Short-circuit current (Isc)	2.10A	2.2-A	2.27A
Module Efficiency	21.4%	22.4%	23.5%

*STC: Irradiance 1000W/m², AM1.5 spectrum, module temperature 25°C

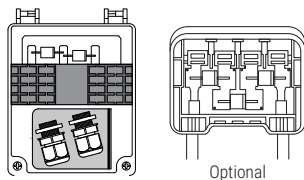
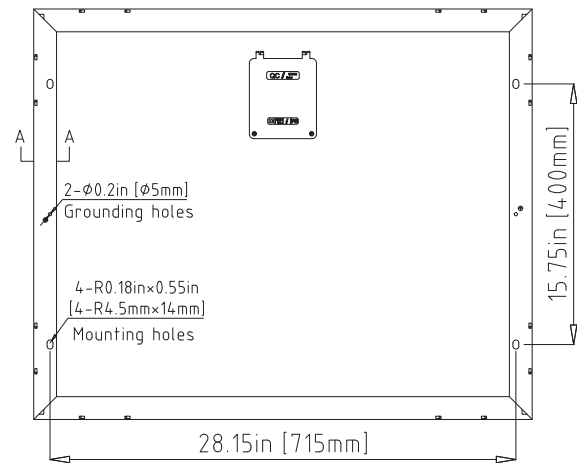
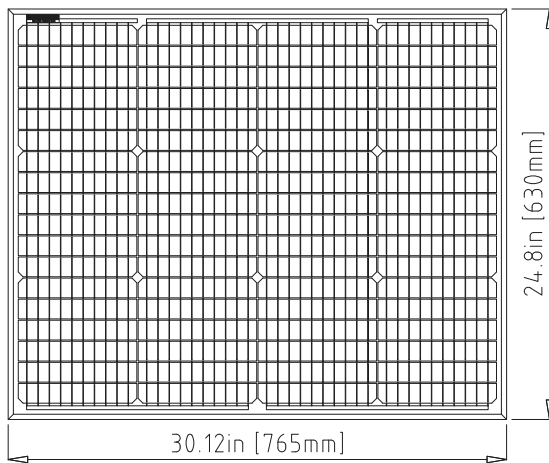
Temperature Characteristics

Temperature coefficient of Voc	-(80±10)mV/°C
Temperature coefficient of Isc	(0.065±0.015)%/°C
Temperature coefficient of power	-(0.5±0.05)%/°C
NOCT (Air 20°C; Sun 0.8kW/m² wind 1m/s)	47±2°C

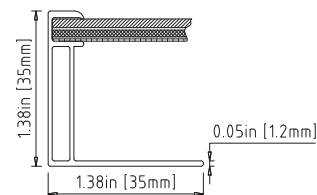
I-V Curves (STC) ST-090Q-24CID2(-QC)



Mechanical Diagrams

ST-080Q-24CID2(-QC)


Junction Box
Top View (Lid Open)



Section A-A