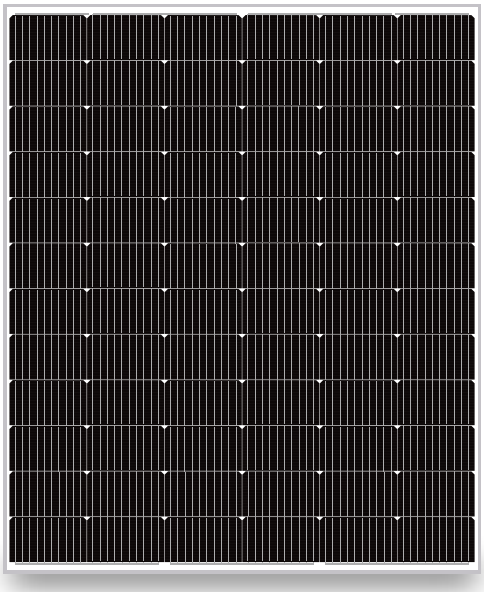
SLD TECH™
Renewable Technology And Solutions

SOLAR PANEL

280W-320W

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.



C SA US
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

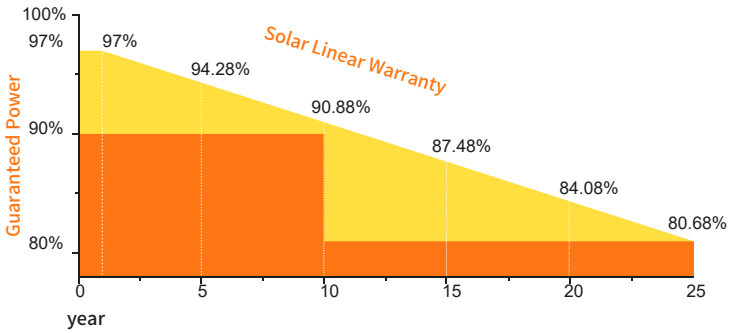
Enhanced Safety

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(6x12)
Module dimension	53.15in.x44.61in.x1.38/1.57in. [1350mmx1133mmx35/40mm]
Weight	36.03/37.73lbs[16.34/17.11kg]

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)

SOLAR PANEL

Electrical Characteristics				280W-295W
Module Type	ST-280Q-24CID2(-QC)	ST-285Q-24CID2(-QC)	ST-290Q-24CID2(-QC)	ST-295Q-24CID2(-QC)
Maximum power (Pmax)	280W	285W	290W	295W
Voltage at Pmax (Vmp)	39.69V	39.97V	40.24V	40.52V
Current at Pmax (Imp)	7.05A	7.13A	7.21A	7.28A
Open-circuit voltage (Voc)	46.64V	46.78V	46.92V	47.06V
Short-circuit current (Isc)	7.42A	7.50A	7.58A	7.66A
Module Efficiency	20.7%	21.1%	21.5%	21.9%

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

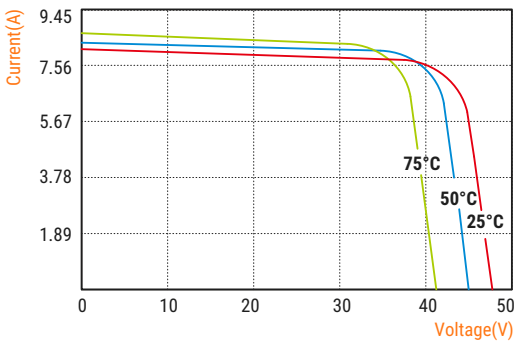
Electrical Characteristics					300W-320W
Module Type	ST-300Q-24CID2(-QC)	ST-305Q-24CID2(-QC)	ST-310Q-24CID2(-QC)	ST-315Q-24CID2(-QC)	ST-320Q-24CID2(-QC)
Maximum power (Pmax)	300W	305W	310W	315W	320W
Voltage at Pmax (Vmp)	40.73V	41.02V	41.38V	41.74V	42.02V
Current at Pmax (Imp)	7.37A	7.44A	7.49A	7.55A	7.62A
Open-circuit voltage (Voc)	47.16V	47.34V	47.52V	47.62V	47.76V
Short-circuit current (Isc)	7.75A	7.82A	7.88A	7.94A	8.01A
Module Efficiency	22.2%	22.6%	23%	23.3%	23.7%

*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

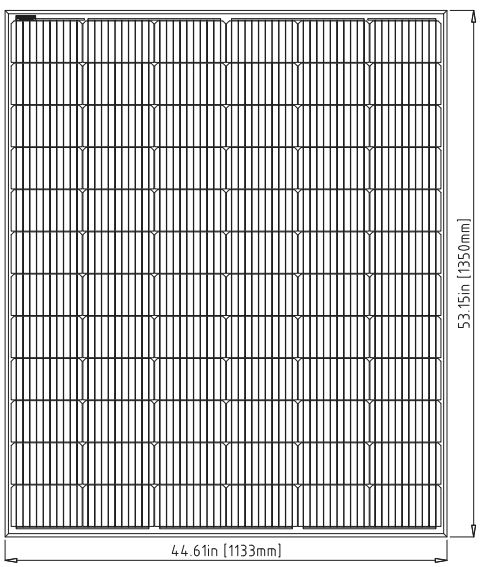
I-V Curves (STC)

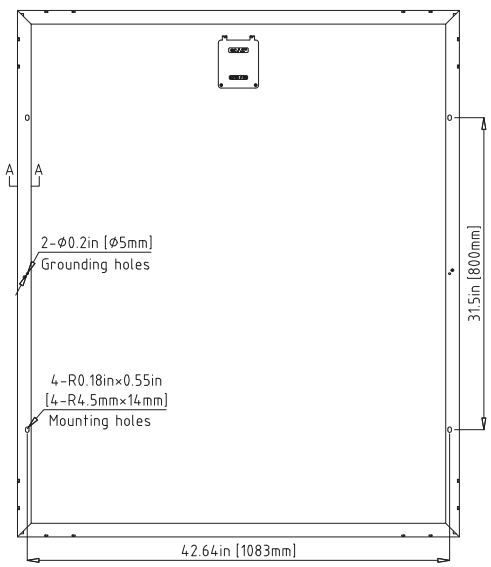
ST-320Q-24CID2(-QC)

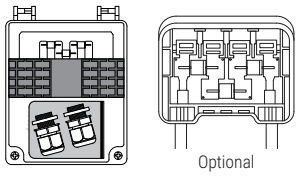


Mechanical Diagrams

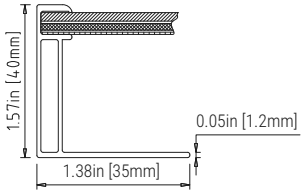
ST-300Q-24CID2(-QC)







Junction Box
Top View (Lid Open)



Section A-A