## **SOLAR PANEL**



# ST-255Q-24CID2-QC

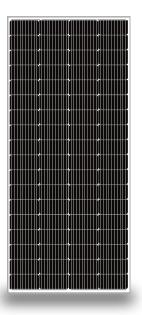
### **High Efficiency Monocrystalline PV Module**

- 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.





**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**

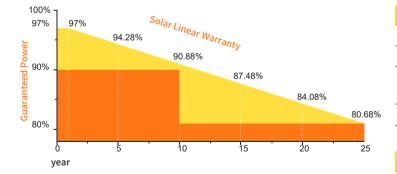
Equipped with specialized design elements, minimizing risk of ignition in hazardous environments, further adhering to CID2 certification standards



#### **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: 3%

#### Warranty Information:

10 Year Product Workmanship

| Specifications               |   |
|------------------------------|---|
| Cells                        | Monocrystalline silicon solar cell              |
| No. of cells and connections | 72(4x18)  |
| Module dimension             | 67.9in.x30.24in.x1.57in.<br>[1725mmx768mmx40mm] |
| Weight                       | 33.46lbs[15.18kg]                               |

| Rating Characteristics      |                      |
|-----------------------------|----------------------|
| Operating temperature       | -40°C to 65°C        |
| Maximum system voltage      | 600V 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                  |
| remperature code rating     |                      |

<sup>\*</sup>NOCT:Nominal operating cell temperature (the data is only for reference)



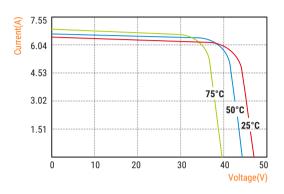




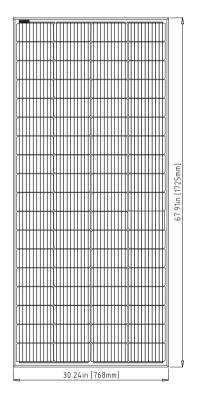
| <b>Electrical Characteristics</b>                                  |                   |  |
|--|-------------------|--|
| Module Type  | ST-255Q-24CID2-QC |  |
| Maximum power (Pmax)   | 255W              |  |
| Voltage at Pmax (Vmp)  | 40.59V            |  |
| Current at Pmax (Imp)  | 6.28A             |  |
| Open-circuit voltage (Voc)   | 47.09V            |  |
| Short-circuit current (Isc)  | 6.61A             |  |
| Module Efficiency  | 22.00%            |  |
| *STC: Irradiance 1000W/m². AM1.5 spectrum, module temperature 25°C |                   |  |

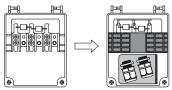
| Temperature Characteristics         |                   |
|-------------------------------------|-------------------|
| Temperature coefficient of Voc      | -(80±10)mV/°C     |
| Temperature coefficient of Isc      | (0.065±0.015)%/°C |
| Temperature coefficient of power    | -(0.5±0.05)%/°C   |
|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

## **I-V Curves (STC)** ST-255Q-24CID2-QC

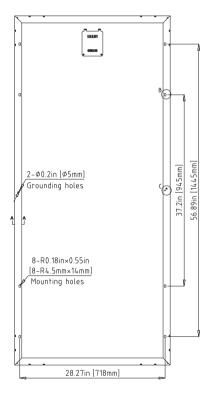


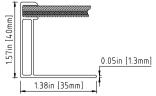
**Mechanical Diagrams** ST-255Q-24CID2-QC





**Junction Box** Top View (Lid Open)





Section A-A