# SW585N-144

## N Type TOPcon 144 Cells 565W-585W

## Mono Solar Panel Features

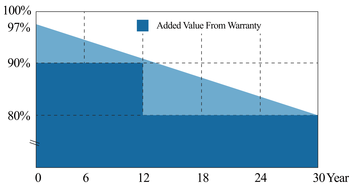
- Widely using of the most popular and mature type of modules for solar system
- High power output and highest conversion efficiency of 22.65%
- Anti-reflective and anti-soiling surface reduces power loss from dirt and dust
- Outstanding Performance in low-light irradiance environments
- Excellent mechanical load resistance: Certified to withstand high wind loads (2400Pa) and Snow loads (5400Pa)
- Positive power tolerance: 0~+5W

## Warranty

- 12 years for product defects in materials & workmanship
- 12 years for 90% of warranted minimum power output
- 30 years for 80% of warranted minimum power output
- 30 years liner warranty

## Reliable Quality

- Positive power tolerance: 0~+5W
- 100% EL Double-inspection ensures modules are defects free
- Modules Binned by Current to improve system performance
- Potential induced Degradation (PID) Resistant



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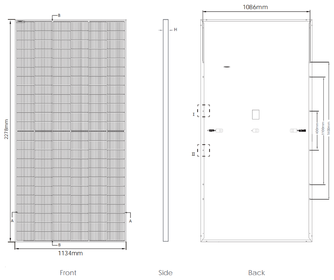
## Mechanical parameters

| | |
|---|---|
| Cell(mm) | N Type Mono |
| Weight(kg) | 28kg |
| Glass Thickness | 3.2mm |
| Dimensions (L*W*H)(mm) | 2278*1134*35mm |
| Cable Cross Section Size (mm²) | 4 |
| Cable Cross Section Length (mm) | 300 |
| No.of Cells and Connections | 144(6*24) |
| Junction Box | IP68 |
| Connector | MC4 Compatiple |

## Engineering Drawings




## Working Conditions

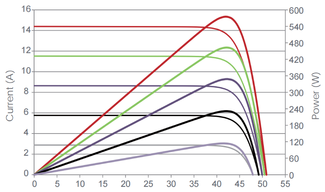
| | |
|---|---|
| Maximum System Voltage | DC 1000V/1500V(IEC) |
| Operating Temperature | -40℃~+85℃ |
| Maximum Series Fuse | 25A |
| Maximum Static Load,Front (e.g.,snow and wind) | 5400Pa (112 lb/ft²) |
| Maximum Static Load,Back (e.g.,wind) | 2400Pa (50 lb/ft²) |
| NOCT | 43±2℃ |
| Positive power tolerance | 0~+5W |
| Application Class | Class A |

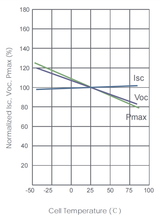
| | |
|---|---|
| Modules Per Pallet | 31Pcs |
| Modules Per 40HQ | 620Pcs |

## Electrical Parameters

| Module | SW565N-144 ~ SW585N-144 | | | | |
|---|---|---|---|---|---|
| Encapsulation | Class/Eva/Cell/Eva/Backsheet | | | | |
| Maximum Power Pmax (W) | 565 | 570 | 575 | 580 | 585 |
| Maximum Power Voltage (Vmp/V) | 41.92 | 42.07 | 42.22 | 42.37 | 42.52 |
| Maximum Power Current (Imp/A) | 13.48 | 13.55 | 13.62 | 13.69 | 13.76 |
| Open Circuit Voltage (Voc/V) | 50.60 | 50.74 | 50.88 | 51.02 | 51.16 |
| Short Circuit Current (Isc/A) | 14.23 | 14.31 | 14.39 | 14.47 | 14.55 |
| Module Efficiency (%) | 21.87 | 22.07 | 22.26 | 22.45 | 22.65 |
| Power Tolerance (W) | 0 ~ +5W | | | | |
| Temperature Coefficient of Isc (αIsc) | +0.045%/℃ | | | | |
| Temperature Coefficient of Voc (βVoc) | -0.25%/℃ | | | | |
| Temperature Coefficient of Pmax (γPmp) | -0.29%/℃ | | | | |
| STC | Irradiance 1000W/㎡, Cell Temperature 25℃, Air Mass 1.5 | | | | |

## I-V Curve

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