

## LINEAR PERFORMANCE WARRANTY

12 Years Product Warranty 25 Years Linear Power Warranty


## Comprehensive Certificates

- IEC 61215, IEC 61730, UL1703, CEC Listed, MCS and CE
- ISO 9001:2008: Quality management systems
- ISO 14001:2004: Environmental management systems
- BS OHSAS 18001: 2007: Occupational health and safety management system
- Environmental policy: The first solar company in China to complete intertek' s carbon footprint evaluation program and receive green leaf mark verfication for our products


## Reliable Quality

## - Positive power tolerance: $0 \sim+5 \mathrm{~W}$

- 100\% EL double-inspection ensures modules are defects free
- Modules binned by current to improve system performance
- Potential Induced Degradation (PID) Resistant


# EL435~455M <br> -72 H ( 98 ) 

High Efficiency Mono Crystalline PERC Solar Module

## KEY FEATURES >>>>



## 9 Busbar Solar Cell:

9 busbar solar cell adopts new technology to improve theefficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.


## High Power Output:

With up to 455 Wp and $20.90 \%$ efficiency, highest performing module of its kind on the market

## PID RESISTANT:

Limited power degradation caused by PID effect is guaranteed understrict testing condition ( $85^{\circ} \mathrm{C} / 85 \% \mathrm{RH}, 96$ hours) for mass production.

## Low-light Performance:

Advanced glass and surface texturing allow for excellent performance in low-light environments.

## Severe Weather Resilience:

Certified to withstand: wind load (3800 Pascal) and snow load (5400 Pascal).

Durability against extreme environmental conditions:
High salt mist and ammonia resistance certified by TÜV SÜD.

## Temperature Coefficient:

Improved temperature coefficient decreases power loss during high temperatures.

## SPECIFICATIONS

| Module Type | EL-435 | 1-72H | EL-440 | $1-72 \mathrm{H}$ | EL-445 | -72H | EL-450 | -72H | EL-455 | -72H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Peak Power (Pmax) | 435W | 321W | 440W | 324W | 445W | 327W | 450W | 330W | 455W | 333W |
| Open Circuit Voltage (Voc) | 49.40 V | 45.48 V | 49.60 V | 45.51 V | 49.79 V | 45.54 V | 49.98 V | 45.56 V | 50.17A | 45.59 V |
| Short circuit Current (Isc) | 11.36A | 9.09A | 11.42A | 9.16A | 11.48A | 9.22A | 11.54A | 9.29A | 11.60A | 9.35A |
| Peak Power Voltage (Vmpp) | 40.81 V | 37.56 V | 41.01 V | 37.67 V | 41.20 V | 37.77 V | 41.40 V | 37.88 V | 41.59 V | 37.98 V |
| Peak Power Current (Impp) | 10.66A | 8.55A | 10.73A | 8.60A | 10.80A | 8.66A | 10.87A | 8.71A | 10.94A | 8.77A |
| Component Efficiency (\%) | 19.98\% |  | 20.21\% |  | 20.44\% |  | 20.67\% |  | 20.90\% |  |

STC(Standard Testing Condittions): Irradiance $1000 \mathrm{~W} / \mathrm{m}^{2}$,Cell Temperature $25^{\circ} \mathrm{C}, \mathrm{AM} 1.5$
NMOT(Nominal Moudule Operating Temperature): Irradiance $800 \mathrm{~W} / \mathrm{m}^{2}$,Ambient Temperature $20^{\circ} \mathrm{C}$, Wind Speed $1 \mathrm{~m} / \mathrm{s}$

之

| Standard Working Temperature (Noct) | $45 \pm 2^{\circ} \mathrm{C}$ |
| :--- | ---: |
| Peak Power Temperature Coefficient | $-0.36 \% /{ }^{\circ} \mathrm{C}$ |
| Temperature Coefficient of Open Circuit Voltage | $-0.28 \% /{ }^{\circ} \mathrm{C}$ |
| Short-circuit Current Temperature Coefficient | $+0.05 \% /{ }^{\circ} \mathrm{C}$ |


| 4) Temperature Characteristics |  |
| :---: | :---: |
| Working Temperature | $-40^{\circ} \mathrm{C}$ to $\sim+85^{\circ} \mathrm{C}$ |
| Maximum System Voltage | DC 1500V (IEC) |
| Maximum Fuse Rating | 20A |
| Power Tolerance | 0/+5W |


| (\%) Mechanical Data |  |
| :---: | :---: |
| Cell Type | 166x83mm Mono |
| Cell Orientation | 144(6x24) |
| Module Dimension | $2095 \times 1039 \times 35 \mathrm{~mm}$ |
| Weight | 23.0 kg |
| Front 3.2 m | 3.2 mm high transmittance, reinforced glass |
| Aluminum Frame | Anodized Aluminum Alloy |
| Junction Box | IP68 (3 Bypass Diodes) |
| $4.0 \mathrm{~mm}^{2}$ |  |
| Connecting Cable | Cable length |
|  | 300 mm |
| Plug Connector | MC4 compatible connector |
| Maximum Mechanical Load | Front $5400 \mathrm{~Pa} /$ Back 2400 Pa |

Module Dimensions(mm)


Specifications in this datasheet are subject to change without prior notice.

## -.v curve ||||||||||||



* Power measurement tolerance: $\pm 3 \%$

Electrical data in this catalogue do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

