# HIPRO III

## TP660M - 295 / 300 / 305 / 310W

High Efficiency MBB PERC Monocrystalline Solar Module

60-Cell Series

## KEY FEATURES

### 12 bus-bar cell technology
Excellent anti-microcracking performance with more balanced interior stress; grid pattern current path, lower Rs

### Maximize limited space
PERC cell technology, maximum power output 310W

### Significantly lower the risk of hot spot
Special circuit design with much lower hot spot temperature

### Excellent low light performance
Advanced surface texturing · Back surface field

### Excellent Anti-PID performance
2 times of industry standard Anti-PID test by TUV Rheinland

### Highly reliable due to stringent quality control
In-house testing goes well beyond certification requirements

### Certified to withstand the most challenging environmental conditions
2400 Pa wind load · 5400 Pa snow load · 25 mm hail stones at 82 km/h

### IP68 junction box
The highest waterproof level

## ABOUT TALESUN SOLAR

TALESUN Solar is one of the world's largest integrated clean energy providers with 4 GW cell and 5 GW module production capacity globally. Its standard and high-efficiency product offerings are among the most powerful and cost-effective in the industry. Talesun Solar is committed to provide customers with customized; systematized and trustworthy turnkey solutions. Till now, Talesun Solar has accumulatively shipped more than 10 GW modules globally.

## SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001 : 2008 Quality Management System
- ISO 14001 : 2004 Environment Mangement System
- OHSAS 18001 : 2007 Occupational Health and Safety Management System

## QUALITY WARRANTY

TALESUN guarantees that defects will not appear in materials and workmanship defined by IEC61215, IEC61730 or UL1703 under normal installation, use and maintenance as specified in Talesun's installation manual for 10 years from the warranty starting date.

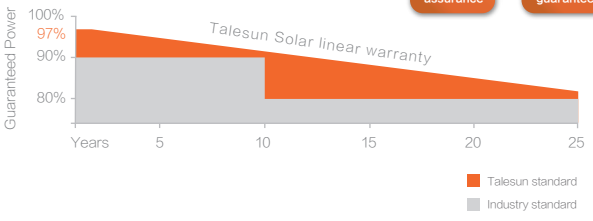
PowerGuard SPECIALTY INSURANCE SERVICES · SOLARIF · PICC · 永诚保险 ALLTRUST INSURANCE

## PERFORMANCE WARRANTY

Monocrystalline Solar Module

10 years Quality assurance

25 years Power output guarantee




TALESUN

Web: www.talesun.com
Tel: + 86 400 885 1098
Add: No.1 Taelsun Road, Shajiabang, Changshu, P.R. China

## ELECTRICAL PARAMETERS

### Performance at STC (Power Tolerance 0 – +3%)

| | | | | |
|---|---|---|---|---|
| Maximum Power ( Pmax/W ) | 295 | 300 | 305 | 310 |
| Operating Voltage ( Vmpp/V ) | 32.6 | 32.9 | 33.2 | 33.5 |
| Operating Current ( Impp/A ) | 9.05 | 9.12 | 9.20 | 9.26 |
| Open-Circuit Voltage ( Voc/V ) | 39.5 | 39.7 | 39.9 | 40.1 |
| Short-Circuit Current ( Isc/A ) | 9.52 | 9.58 | 9.64 | 9.69 |
| Module Efficiency ηm ( % ) | 18.0 | 18.3 | 18.6 | 18.9 |

### Performance at NOCT

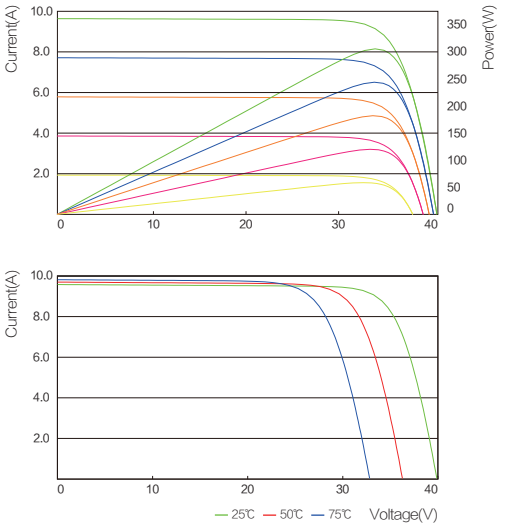
| | | | | |
|---|---|---|---|---|
| Maximum Power ( Pmax/W ) | 217 | 221 | 225 | 229 |
| Operating Voltage ( Vmpp/V ) | 30.1 | 30.3 | 30.7 | 31.0 |
| Operating Current ( Impp/A ) | 7.24 | 7.30 | 7.34 | 7.38 |
| Open-Circuit Voltage ( Voc/V ) | 36.5 | 36.7 | 36.9 | 37.0 |
| Short-Circuit Current ( Isc/A ) | 7.69 | 7.74 | 7.79 | 7.83 |

STC: Irradiance 1000W/m², Cell Temperature 25° C, Air Mass AM1.5  NOCT: Irradiance at 800W/m², Ambient Temperature 20° C, Wind Speed 1m/s

## MECHANICAL SPECIFICATION

| | |
|---|---|
| Cell Type | MBB Mono |
| Cell Dimensions | 156.75*156.75mm(6inch) |
| Cell Arrangement | 60(6*10) |
| Weight | 18.5kg(40.8lbs) |
| Module Dimensions | 1650*992*35mm(64.96*39.06*1.38inch) |
| Cable Length | 900mm(35.4inch) |
| Cable Cross Section Size | 4mm²(0.006sq.in) |
| Front Glass | 3.2mm High Transmission, Tempered Glass |
| No.of Bypass Diodes | 3/6 |
| Packing Configuration (1) | 30pcs/Pallet,840pcs/40hq |
| Packing Configuration (2) | 30pcs+5pcs/Pallet, 910pcs/40hq |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68 |

## I-V CURVE



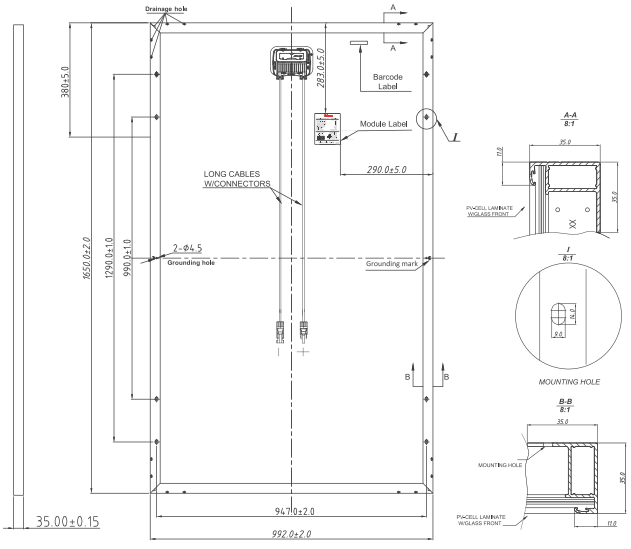

## OPERATING CONDITIONS

| | |
|---|---|
| Maximum System Voltage | 1000V/DC(IEC)/1500V/DC(IEC) |
| Operating Temp. | -40℃~+85℃ |
| Maximum Series Fuse | 15A |
| Static Loading | 5400Pa |
| Conductivity at Ground | ≤ 0.1Ω |
| Safety Class | II |
| Resistance | ≥100MΩ |
| Connector | MC4 Compatible |

## TEMPERATURE COEFFICIENT

| | |
|---|---|
| Temperature Coefficient Pmax | -0.39%/℃ |
| Temperature Coefficient Voc | -0.30%/℃ |
| Temperature Coefficient Isc | +0.05%/℃ |
| NOCT | 45±2℃ |

## TECHNICAL DRAWINGS






TALESUN