

# HIPRO PERC mono

## TP660M / TP660M(H)

### 300 / 305 / 310 / 315 / 320 W

High Efficiency PERC Monocrystalline Solar Module  
60-Cell Series



#### KEY FEATURES



#### Maximize limited space

PERC cell technology, maximum power output 320W



#### Excellent low light performance

Advanced surface texturing·Back surface field



#### Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



#### 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



#### Lower temperature coefficients

Enhance power generation

#### 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.

#### SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001 : 2015 Quality Management System
- ISO 14001 : 2015 Environment Mangement System
- ISO 45001 : 2018 Occupational Health and Safety Management Systems



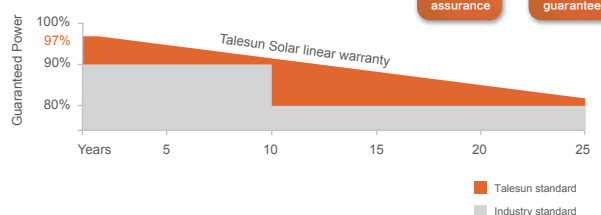
#### QUALITY WARRANTY

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.



#### PERFORMANCE WARRANTY

Monocrystalline Solar Module



## ELECTRICAL PARAMETERS

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

Maximum Power(P <sub>max</sub> /W)	300	305	310	315	320
Operating Voltage(V <sub>mpp</sub> /V)	32.9	33.2	33.5	33.9	34.3
Operating Current(I <sub>mpp</sub> /A)	9.12	9.20	9.26	9.30	9.34
Open-Circuit Voltage(V <sub>oc</sub> /V)	39.7	39.9	40.1	40.3	40.5
Short-Circuit Current(I <sub>sc</sub> /A)	9.58	9.64	9.69	9.75	9.81
Module Efficiency η <sub>m</sub> (%)	18.33	18.63	18.94	19.24	19.55

### Performance at NMOT

Maximum Power(P <sub>max</sub> /W)	223.3	227.2	230.6	234.1	237.5
Operating Voltage(V <sub>mpp</sub> /V)	30.7	31.0	31.3	31.5	31.7
Operating Current(I <sub>mpp</sub> /A)	7.28	7.34	7.38	7.43	7.48
Open-Circuit Voltage(V <sub>oc</sub> /V)	37.0	37.1	37.3	37.5	37.6
Short-Circuit Current(I <sub>sc</sub> /A)	7.73	7.78	7.82	7.87	7.92

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

## MECHANICAL SPECIFICATION

Cell Type	Mono-Crystalline Silicon(5Busbar)
Cell Dimensions	6inches
Cell Arrangement	60(6*10)
Weight	18.5 (40.79 lbs)
Module Dimensions	1650×992×35 (64.96×39.06×1.38inches)
Cable Length	900mm(35.43inches)
Cable Cross Section Size	4mm <sup>2</sup> (0.006inches <sup>2</sup> )
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

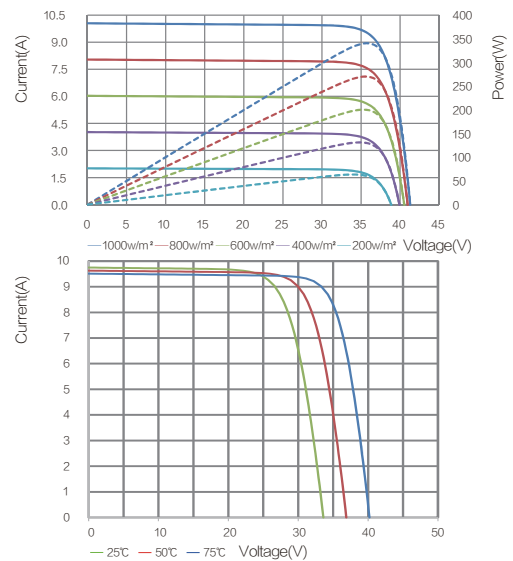
## OPERATING CONDITIONS

Maximum System Voltage	1000V/DC(IEC)/1500V/DC(IEC)
Operating Temp	-40°C-+85°C
Maximum Series Fuse	20A
Static Loading	5400Pa
Conductivity at Ground	≤ 0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible

## TEMPERATURE COEFFICIENT

Temperature Coefficient P <sub>max</sub>	-0.39%/°C
Temperature Coefficient V <sub>oc</sub>	-0.30%/°C
Temperature Coefficient I <sub>sc</sub>	+0.05%/°C
NMOT	43±2°C

## I-V CURVE



## TECHNICAL DRAWINGS

