

## 60 CELL MONOCRYSTALLINE MODULE

## 275-315W POWER OUTPUT RANGE

## 19.2% MAXIMUM EFFICIENCY

## 0~+5W POSITIVE POWER TOLERANCE

Founded in 2008, Tidesolar is the China's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Tidesolar now distributes its PV products to over 30 countries all over the world. Tidesolar is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Tidesolar as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

### Comprehensive Products And System Certificates

IEC61215/IEC61730/UL1703/IEC61701/IEC62716  
ISO 9001: Quality Management System  
ISO 14001: Environmental Management System  
ISO14064: Greenhouse gases Emissions Verification  
OHSAS 18001: Occupation Health and Safety Management System



### Excellent low light performance on cloudy days, mornings and evenings

- Advanced surface texturing
- Back surface field
- Selective emitter



### Maximize limited space with top-end efficiency

- Up to 192W/m<sup>2</sup> power density
- Low thermal coefficients for greater energy production at high operating temperatures



### Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant
- 100% EL double inspection

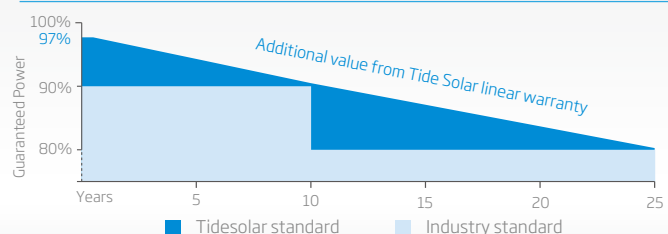


### Certified to withstand the most challenging environmental conditions

- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

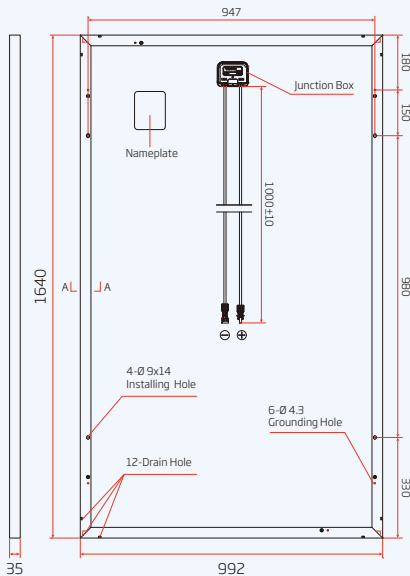
### LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty · 25 Year Linear Power Warranty

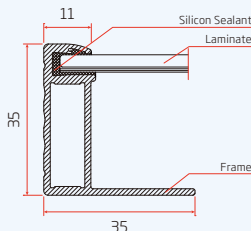


PRODUCTS	POWER RANGE
TDM60	280-315W 280-315W 275-310W

### DIMENSIONS OF PV MODULE(mm)

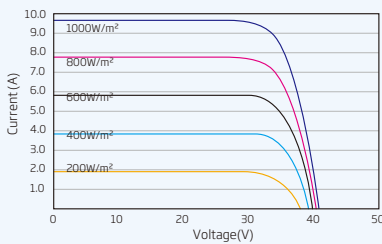


Back View

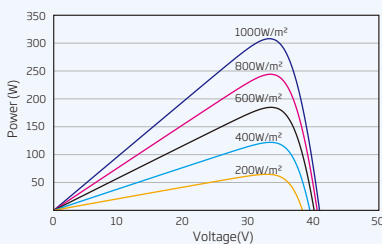


(A-A)

### I-V CURVES OF PV MODULE(305W)



### P-V CURVES OF PV MODULE(305W)



### ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}$ (Wp)*	275	280	285	290	295	300	305	310	315
Power Output Tolerance- $P_{MAX}$ (W)	0 ~ +5								
Maximum Power Voltage- $V_{MPP}$ (V)	31.4	31.7	31.8	32.2	32.5	32.6	32.9	33.1	33.3
Maximum Power Current- $I_{MPP}$ (A)	8.76	8.84	8.97	9.01	9.08	9.19	9.28	9.37	9.46
Open Circuit Voltage- $V_{OC}$ (V)	38.4	38.4	38.5	38.9	39.6	39.8	40.0	40.2	40.5
Short Circuit Current- $I_{SC}$ (A)	9.24	9.42	9.51	9.66	9.68	9.77	9.85	9.94	10.0
Module Efficiency $\eta_m$ (%)	16.8	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.2

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.  
\*Measuring tolerance: ±3%.

### ELECTRICAL DATA (NOCT)

Maximum Power- $P_{MAX}$ (Wp)	205	209	212	216	220	223	227	231	235
Maximum Power Voltage- $V_{MPP}$ (V)	29.1	29.4	29.5	29.9	30.1	30.2	30.5	30.7	30.9
Maximum Power Current- $I_{MPP}$ (A)	7.04	7.10	7.21	7.24	7.30	7.38	7.46	7.53	7.60
Open Circuit Voltage- $V_{OC}$ (V)	35.7	35.7	35.8	36.2	36.8	37.0	37.2	37.4	37.6
Short Circuit Current- $I_{SC}$ (A)	7.46	7.61	7.68	7.80	7.82	7.89	7.95	8.03	8.10

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

### MECHANICAL DATA

Solar Cells	Monocrystalline 156.75 × 156.75 mm (6 inches)
Cell Orientation	60 cells (6 × 10)
Module Dimensions	1640 × 992 × 35 mm (65.0 × 39.1 × 1.38 inches)
Weight	18.6 kg (41.0 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass
Backsheet	White [DD05A(II), DD05A.08(II)]; Black [DD05A.05(II)]
Frame	Silver Anodized Aluminium Alloy [DD05A(II)]; Black Anodized Aluminium Alloy [DD05A.08(II), DD05A.05(II)]
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ), 1000 mm (39.4 inches)
Connector	MC4/UTX/TS4/QC4*

\*Please refer to regional datasheet for specified connector.

### TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	44°C (±2°C)
Temperature Coefficient of $P_{MAX}$	-0.39%/°C
Temperature Coefficient of $V_{OC}$	-0.29%/°C
Temperature Coefficient of $I_{SC}$	0.05%/°C

### MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1000V DC (IEC) 1000V DC (UL)
Max Series Fuse Rating	15A (Power ≤ 285W) 20A (Power ≥ 290W)

(DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection)

### WARRANTY

- 10 year Product Workmanship Warranty
- 25 year Linear Power Warranty

(Please refer to product warranty for details)

### PACKAGING CONFIGURATION

- Modules per box: 30 pieces
- Modules per 40' container: 840 pieces