THE
ALLMAX ᴹ plus⁺
FRAMED 60-CELL MODULE

60 CELL
MONOCRYSTALLINE MODULE

275-315W
POWER OUTPUT RANGE

19.2%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy, we believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina 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
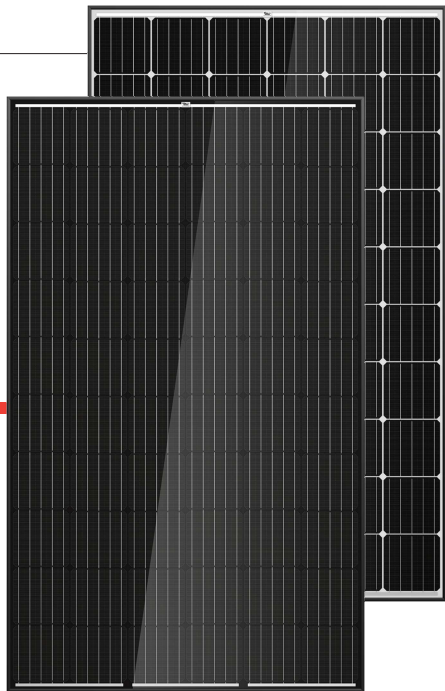
Maximize limited space with top-end efficiency
• Up to 192W/m² power density
• Low thermal coefficients for greater energy production at high operating temperatures
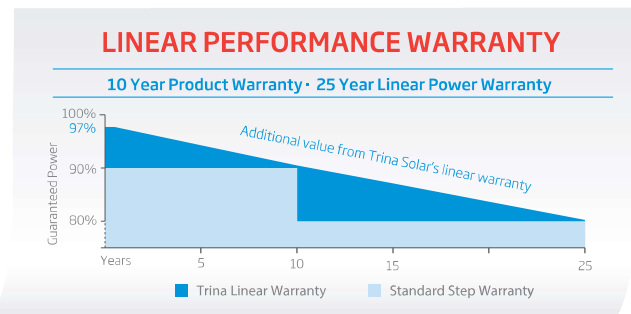
Highly reliable due to stringent quality control
• Over 30 in-house tests (UV, TC, HF, and many more)
• In-house testing goes well beyond certification requirements
• PID resistant
• 100% EL double inspection
• Selective emitter, advanced surface texturing

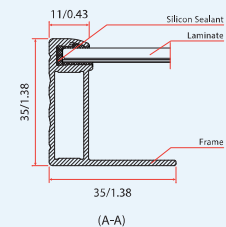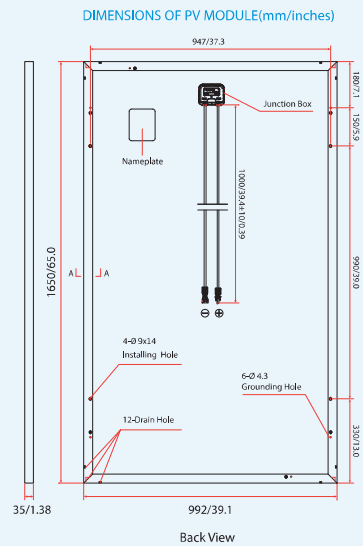### Certified to withstand the most challenging environmental conditions
• 2400 Pa wind load
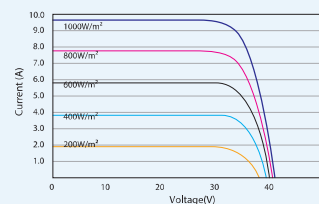• 5400 Pa snow load
• 35 mm hail stones at 97 km/h

LINEAR PERFORMANCE WARRANTY
10 Year Product Warranty · 25 Year Linear Power Warranty

Additional value from Trina Solar's linear warranty

Guaranteed Power: 100% / 97% / 90% / 80%
Years: 5, 10, 15, 25

■ Trina Linear Warranty   ■ Standard Step Warranty

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ALLMAX ᴹ plus⁺

PRODUCTS	POWER RANGE
TSM-DD05A.08(II)	280-315W
TSM-DD05A.05(II)	275-310W

DIMENSIONS OF PV MODULE(mm/inches)

947/37.3
1650/65.0
992/39.1
35/1.38

Junction Box
Nameplate
4-Ø 9x14 Installing Hole
6-Ø 4.3 Grounding Hole
12-Drain Hole

Back View

11/0.43
Silicon Sealant
Laminate
35/1.38
Frame
35/1.38

(A-A)
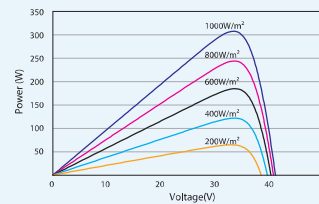
ELECTRICAL DATA (STC)

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 η$_m$ (%)	16.8	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.2

STC: Irradiance 1000W/m², 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/m², 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	1650 × 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.08(II)]; Black [DD05A.05(II)]
Frame	Black Anodized Aluminium Alloy [DD05A.08(II), DD05A.05(II)]
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), 1000 mm (39.4 inches)
Connector	MC4
Fire Type	Type 1 or Type 2

I-V CURVES OF PV MODULE(305W)

P-V CURVES OF PV MODULE(305W)

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

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CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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