

THE

Residential Module

FRAMED 120 HALF-CELL BOB MODULE



120-Cell
MONOCRYSTALLINE MODULE

315 W
POWER OUTPUT RANGE

18.5%
MAXIMUM EFFICIENCY

-5W + 3%
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



PRODUCTS	BACKSHEET COLOR	POWER RANGE
TSM-DD06H.05(II)	Black	315W
FRAME COLOR: Black		



High power output, increased value

- Half-cut cell combined with high module efficiency increases power
- New cell string layout and split J-box location reduces the energy loss caused by inter-row shading
- Lower resistance of half-cut cells ensures higher power



High energy generation, low LCOE

- Excellent 3rd party validated IAM and low light performance with cell process and module material optimization
- Integrated LRF(Light Redirecting Film) to enhance power
- Low P_{max} temp coefficient (-0.36%) increases energy production
- Better anti-shading performance and lower operating temperature



Certified to perform in highly challenging environments

- High PID resistance through cell process and module material control
- Resistant to salt, acid, sand, and ammonia
- Certified to 5400 Pa positive load and 2400 Pa negative load

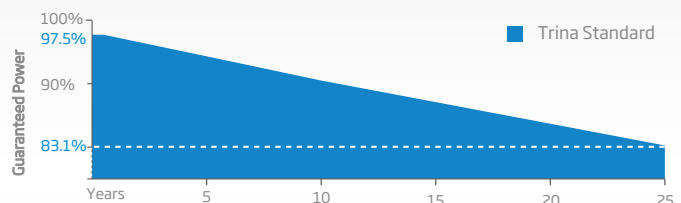


Easy to install, wide application

- Frame design enables compatibility with standard installation methods
- Deployable for ground mounted and rooftop projects
- Safe and easy to transport, handle, and install

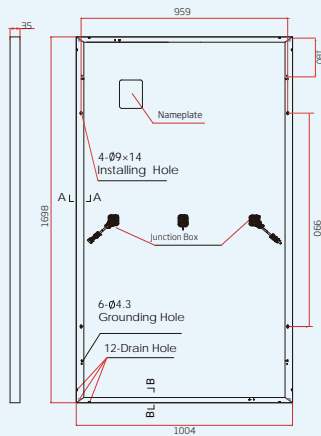
PERFORMANCE WARRANTY

10 Year Product Warranty · 25 Year Power Warranty

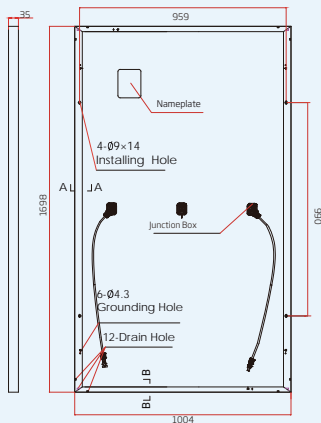


From the 2nd year to the 25th year, the average annual power decline will be no more than 0.6%.

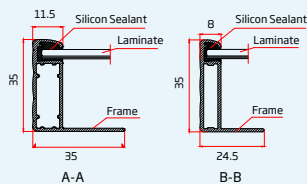
DIMENSIONS OF PV MODULE(mm)



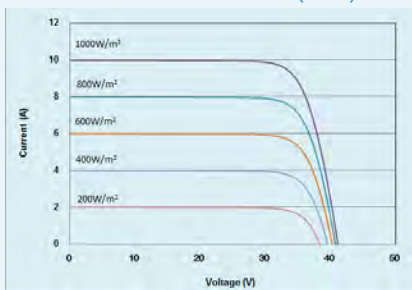
String Inverter Configuration



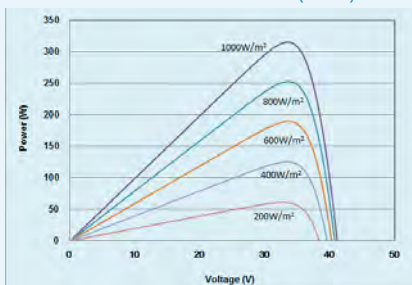
Microinverter or Optimizer Configuration



I-V CURVES OF PV MODULE (315W)



P-V CURVES OF PV MODULE (315W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	315
Power Output Tolerance- P_{MAX} (W)	-5 + 3%
Maximum Power Voltage- V_{MPP} (V)	33.4
Maximum Power Current- I_{MPP} (A)	9.44
Open Circuit Voltage- V_{oc} (V)	41.1
Short Circuit Current- I_{sc} (A)	9.96
Module Efficiency η_m (%)	18.5

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

*Measuring tolerance: ±3%.

ELECTRICAL DATA (NMOT)

Maximum Power- P_{MAX} (Wp)	238.6
Maximum Power Voltage- V_{MPP} (V)	31.6
Maximum Power Current- I_{MPP} (A)	7.55
Open Circuit Voltage- V_{oc} (V)	38.8
Short Circuit Current- I_{sc} (A)	8.02

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	120 cells (6 × 20)
Module Dimensions	1698 × 1004 × 35 mm (66.85 × 39.53 × 1.38 inches)
Weight	18.7 kg (41.2 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened
Encapsulant Material	Glass EVA
Backsheet	Black [DD06H.05(II)]
Frame	35 mm (1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: N 140mm/P 285mm (5.51/11.22 inches) Landscape: N 1200 mm /P 1200 mm (47.24/47.24 inches)
Connector	MC4

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	41°C (±3°C)
Temperature Coefficient of P_{MAX}	-0.36%/°C
Temperature Coefficient of V_{oc}	-0.26%/°C
Temperature Coefficient of I_{sc}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1000V DC (IEC) 1000V DC (UL)
Max Series Fuse Rating	20A

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

WARRANTY

10 year Product Workmanship Warranty
25 year Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 30 pieces
Modules per 40' container: 780 pieces

