

N-type i-TOPCon bifacial dual glass
Monocrystalline module

PRODUCT: TSM-XXXNEG9M5C.26

POWER RANGE: 305-335W

335W

MAXIMUM POWER OUTPUT

0~+5W

BINNING TOLERANCE

17.2%

MAXIMUM EFFICIENCY



Ideal for large scale installations

- Reduce BOS cost by connecting more modules in a string
- 1500V IEC certified



One of the industry's most trusted modules

- Field proven performance



Highly reliable due to stringent quality control

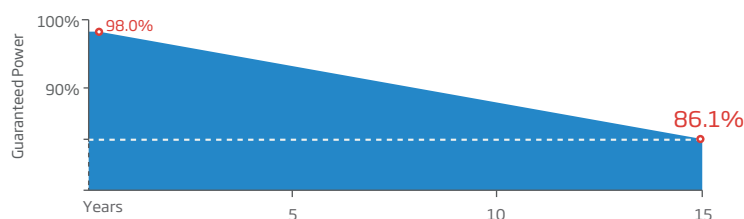
- Rigorous in-house tests (TC, HF etc.)
- 100% EL double inspection
- Fire Class rating C



Certified to withstand the most challenging environmental conditions

- 2400 Pa negative load
- 5400 Pa positive load

Trina Solar's Bifacial Dual Glass Performance Warranty

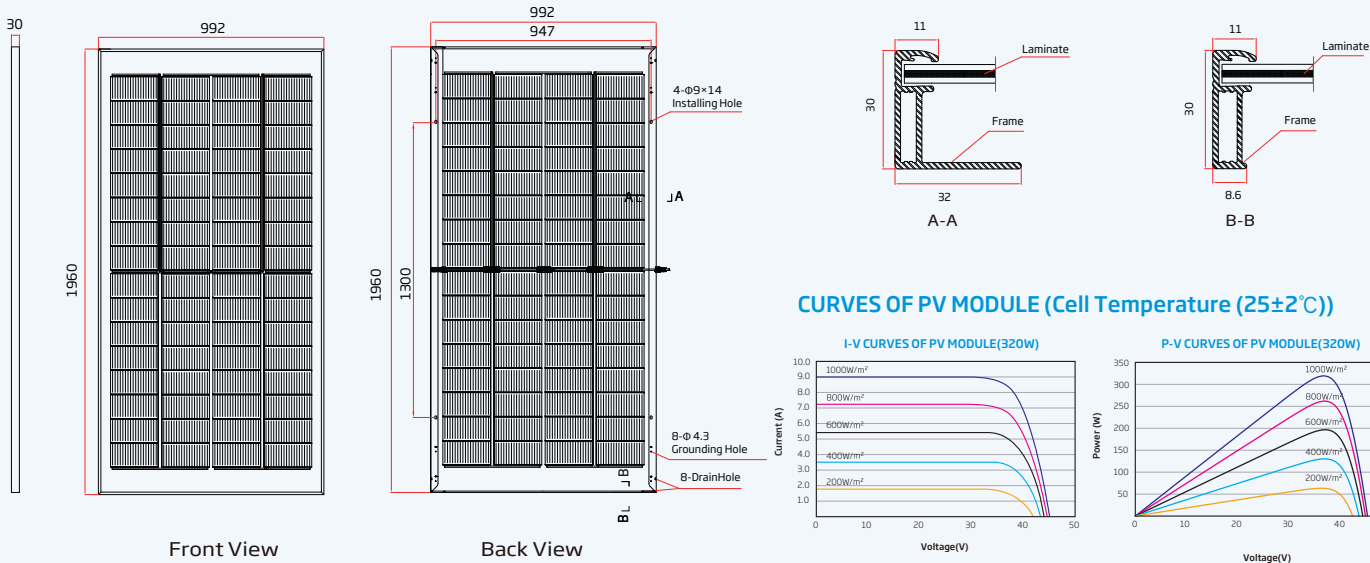


Comprehensive Products and System Certificates



IEC61215/IEC61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupational Health and Safety Management System

DIMENSIONS OF PV MODULE(mm)



CURVES OF PV MODULE (Cell Temperature (25±2℃))

I-V CURVES OF PV MODULE(320W)

P-V CURVES OF PV MODULE(320W)

MECHANICAL DATA

Solar Cells	N-type i-TOPCon Monocrystalline	Frame	30mm (1.18 inches) Anodized Aluminium Alloy
No. of cells	64 cells	J-Box	IP 68 rated
Module Dimensions	1960×992×30 mm (77.17×39.06×1.18 inches)	Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²) Length can be customized
Weight	24.0kg (52.91 lb)	Connector	Stäubli MC4 EVO2
Front Glass	2.0 mm (0.08 inches), AR Coated Heat Strengthened Glass		
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass		

ELECTRICAL DATA (STC & NOCT&BNPI) TSM-XXXNEG9M5C.26 (XXX=305-335)

Testing Condition	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	
Peak Power Watts- P_{MAX} (Wp)*	305	234	338	310	238	343	315	241	349	320	245	355	325	249	360	330	252	366	335	256	371	
Binning Tolerance- P_{MAX} (W)	0 ~ +5																					
Maximum Power Voltage- V_{MPP}	36.5	34.8	36.5	36.9	35.1	36.9	37.3	35.5	37.3	37.7	35.8	37.7	38.2	36.3	38.2	38.6	36.6	38.6	39.0	37.0	39.0	
Maximum Power Current- I_{MPP} (A)	8.36	6.71	9.26	8.41	6.76	9.31	8.45	6.80	9.36	8.49	6.84	9.40	8.51	6.85	9.43	8.55	6.89	9.47	8.59	6.93	9.52	
Open Circuit Voltage- V_{oc} (V)	44.6	42.3	44.6	44.8	42.5	44.8	45.0	42.7	45.0	45.3	43.0	45.3	45.6	43.4	45.6	45.9	43.8	45.9	46.2	44.2	46.2	
Short Circuit Current- I_{sc} (A)	8.83	7.12	9.78	8.88	7.16	9.84	8.92	7.19	9.88	8.96	7.22	9.93	8.98	7.24	9.95	9.02	7.28	9.99	9.06	7.32	10.04	
Module Efficiency η_m (%)	15.7		15.9		16.2		16.5		16.7		17.0		17.2									

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. BNPI:Irradiance at1000W/m²+qx135W /㎡, Air Mass AM1.5,Temp25℃ *Measuring tolerance: ±3%.

Electrical characteristics with different power bin (reference to 5% & 10% backside power gain)

Backside Power Gain	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
Total Equivalent power - P_{MAX} (Wp)	320	336	326	341	331	347	336	352	341	358	347	363	352	369	352	369
Maximum Power Voltage- V_{MPP} (V)	36.5	36.5	36.9	36.9	37.3	37.3	37.7	37.7	38.2	38.2	38.6	38.6	39.0	39.0	39.0	39.0
Maximum Power Current- I_{MPP} (A)	8.78	9.20	8.83	9.25	8.87	9.30	8.91	9.34	8.94	9.36	8.98	9.41	9.02	9.45	9.02	9.45
Open Circuit Voltage- V_{oc} (V)	44.6	44.6	44.8	44.8	45.0	45.0	45.3	45.3	45.6	45.6	45.9	45.9	46.2	46.2	46.2	46.2
Short Circuit Current- I_{sc} (A)	9.27	9.71	9.32	9.77	9.37	9.81	9.41	9.86	9.43	9.88	9.47	9.92	9.51	9.97	9.51	9.97

qPmax: 80%±5%; qVoc:100%±3%; qIsc:80%±5%

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	-0.29%/°C
Temperature Coefficient of V_{oc}	-0.24%/°C
Temperature Coefficient of I_{sc}	0.04%/°C

APPLICATION CONDITIONS

Operating Temperature	-40~+70℃
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	20A

WARRANTY

5 year Product Workmanship Warranty
15 year Power Warranty
2% first year degradation
0.85% Annual Power Attenuation
(Power degradation values above apply to frontside, refer to product warranty for power degradation for backside and other details)

PACKAGING CONFIGURATION

Modules per box: 36 pieces
Modules per 40' container: 864 pieces