



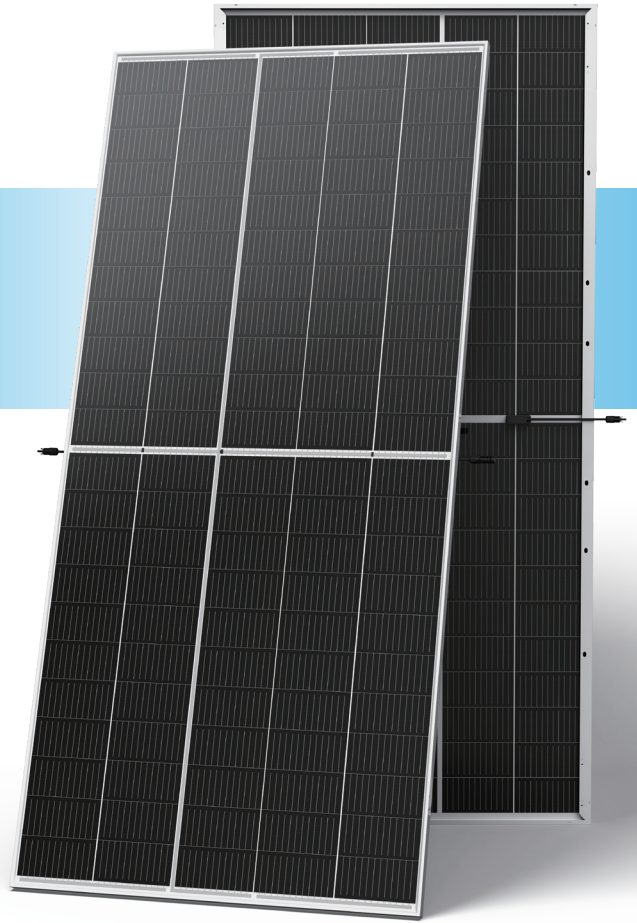
P-type PERC

Bifacial Dual Glass Monocrystalline Module

TSM-DEG19C.20 535-555W

555W / MAXIMUM POWER OUTPUT

21.2% / MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance Of System) cost, shorter payback time
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



High power up to 555W

- Up to 21.2% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



High reliability

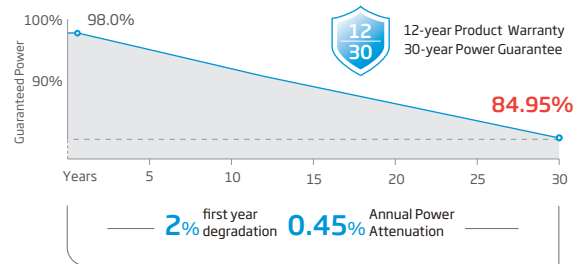
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Up to 25% additional power gain from back side depending on albedo

Performance Warranty



* Please refer to product warranty for details

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716/UL61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO14064: Greenhouse Gases Emissions Verification

ISO45001: Occupational Health and Safety Management System



ELECTRICAL DATA (STC & NOCT)

Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts- $P_{MAX}(W_p)^*$	535	405	540	409	545	413	550	416	555	420
Power Selection (W)**	0 ~ +5									
Maximum Power Voltage- $V_{MPP}(V)$	31.2	29.0	31.4	29.2	31.6	29.4	31.8	29.5	32.0	29.7
Maximum Power Current- $I_{MPP}(A)$	17.16	13.97	17.21	14.02	17.24	14.08	17.29	14.10	17.35	14.14
Open Circuit Voltage- $V_{oc}(V)$	37.5	35.3	37.7	35.5	37.9	35.7	38.1	35.9	38.3	36.1
Short Circuit Current- $I_{sc}(A)$	18.24	14.70	18.30	14.75	18.35	14.79	18.39	14.82	18.43	14.85
Module Efficiency η_m (%)	20.5		20.7		20.9		21.0		21.2	

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. *Measuring tolerance: ±3%. **Power selection up to: +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%
Peak Power Watts- $P_{MAX}(W_p)$	562	589	567	594	572	600	578	605	583	611
Maximum Power Voltage- $V_{MPP}(V)$	31.2	31.2	31.4	31.4	31.6	31.6	31.8	31.8	32.0	32.0
Maximum Power Current- $I_{MPP}(A)$	18.02	18.88	18.07	18.93	18.10	18.96	18.15	19.02	18.22	19.09
Open Circuit Voltage- $V_{oc}(V)$	37.5	37.5	37.7	37.7	37.9	37.9	38.1	38.1	38.3	38.3
Short Circuit Current- $I_{sc}(A)$	19.15	20.06	19.22	20.13	19.27	20.19	19.31	20.23	19.35	20.27

Power Bifaciality: 70±5%.

TEMPERATURE RATINGS

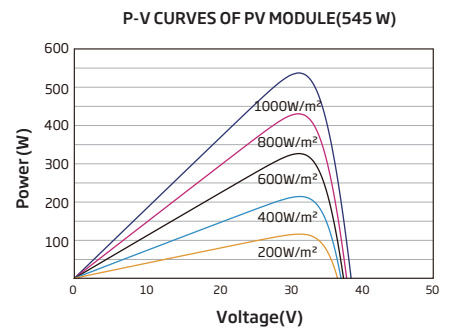
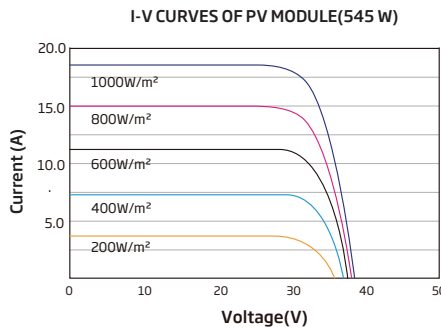
NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	-0.34% /°C
Temperature Coefficient of V_{oc}	-0.25% /°C
Temperature Coefficient of I_{sc}	0.04% /°C

Due to different testing methods, the actual performances might differ from the declared specifications.

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	35A

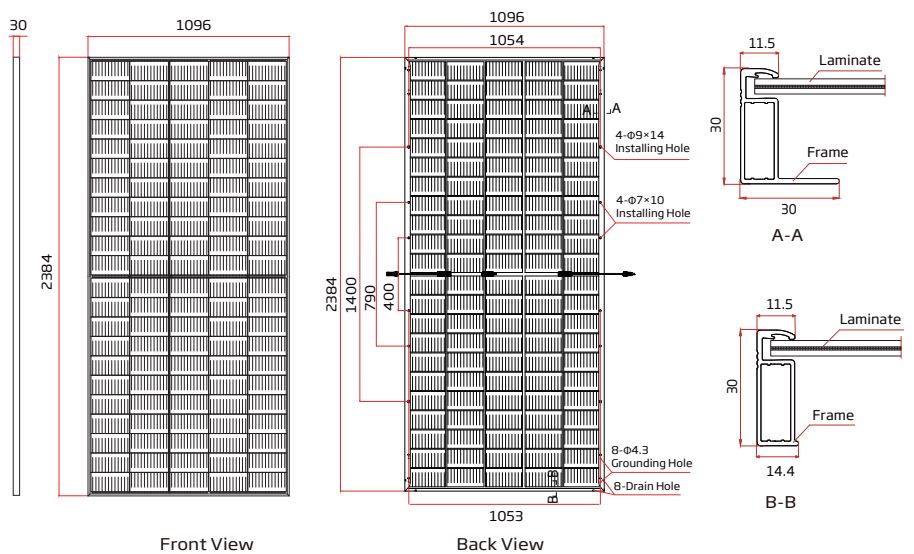
CURVES OF PV MODULE



MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	110 cells
Module Dimensions	2384×1096×30 mm (93.86×43.15×1.18 inches)
Weight	32.3 kg (71.2 lb)
Front Glass	2.0 mm (0.08 inches), AR Coating Heat Strengthened Glass
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Coating)
Frame	30mm (1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: 350/280 mm (13.78/11.02 inches) Length can be customized
Connector	MC4 EV02 / TS4*
PACKAGING CONFIGURATION	Modules per box: 36 pieces Modules per 40' container: 720 pieces

*Please refer to regional datasheet for specified connector.



www.trinasolar.com

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
© 2024 Trina Solar Co., Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.
The right of final interpretation belongs to Trina Solar Co., Ltd.
Version number: TSM_EN_2024_A