



V-Series Modules

5BB Monocrystalline Solar Modules

Peak Power: 355-370Wp

High Quality

- Powered by TSEC premium grade solar cells.
- The solar cell passed UL/ITRI PID test conditions (temperature 85°C, humidity 85%, -1500V, 300hrs)
- The solar module passed ITRI PID test conditions (temperature 85°C, humidity 85%, $\pm 1000V$, 300hrs)

High Reliability

- CNS 15114 mechanical load test 5400Pa
- IEC 61215:2016 mechanical load test 3600Pa (safety factor 1.5)
- Salt mist corrosion testing up to 56 days by ITRI, follow severity 6 in IEC61701 (CNS 15196) standard.

Strict Quality Control

- Current sorting for hot spot protection.
- 3-stage EL tests at pre-lamination, before framing and before delivery.
- Positive tolerance 0~4.99W

Module Characteristics

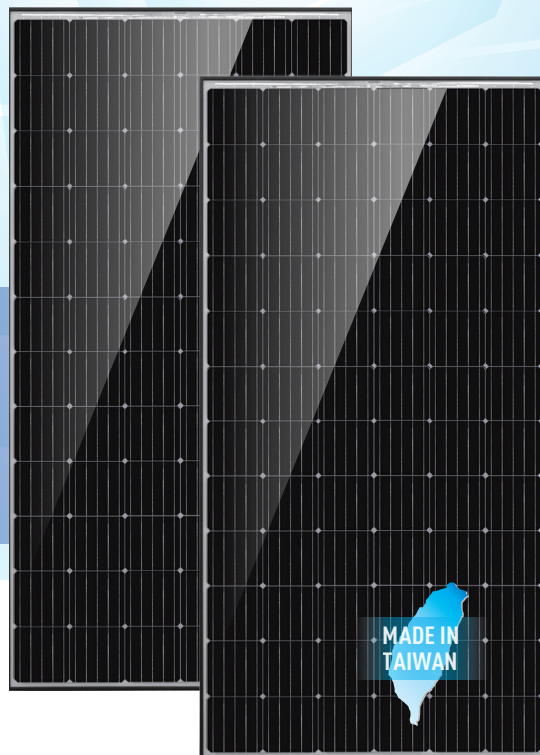
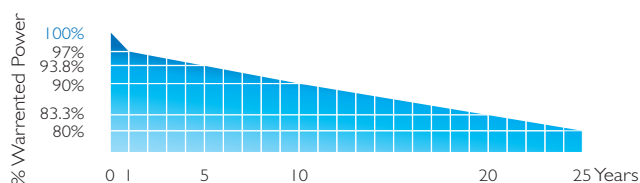
Dimension	1,968 × 992 × 40 mm
Weight	21.5 Kg

Certifications

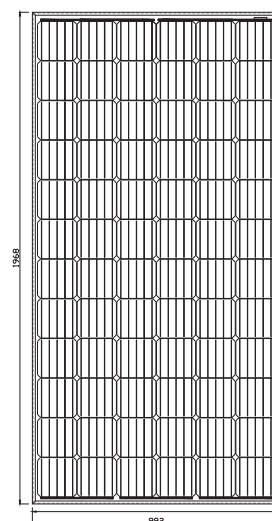
- IEC 61215:2016、IEC 61730-1:2016 & IEC 61730-2:2016
- ISO 9001:2008 Quality management system
- ISO 14001:2015 Standards for environmental management system
- ISO 50001:2011 Energy management system
- OHSAS 18001:2007 International standards for occupational health and safety

Warranty

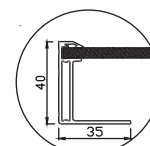
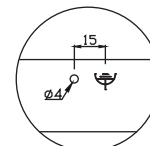
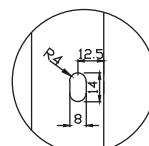
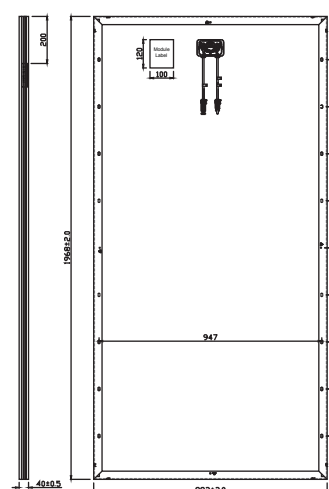
- 10-year materials and workmanship warranty.
- 25-year linear power warranty.



Module Front Side



Module Rear Side



V-Series 370W

5BB Monocrystalline Solar Module



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Performance Under Standard Test Conditions

Model Name			TS72-6M3-355	TS72-6M3-360	TS72-6M3-365	TS72-6M3-370
Max. power at STC	P _{max}	W	355	360	365	370
Max. power voltage	V _{mp}	V	38.05	38.50	38.93	39.32
Max. power current	I _{mp}	A	9.33	9.35	9.38	9.41
Open circuit voltage	V _{oc}	V	46.81	47.25	47.75	48.12
Short circuit current	I _{sc}	A	9.90	9.92	9.94	9.96
F.F. (%)	%		76.60%	76.80%	76.90%	77.20%
Module Conversion Eff.	%		18.18%	18.44%	18.70%	18.95%
Module Effective Conversion Eff.	%		20.18%	20.46%	20.75%	21.03%

* Under Standard Test Condition (1,000W/m², 25°C, AM 1.5): Power Tolerance ±3%

* Module Conversion Eff. (%) = [Max power at STC(w) / (Solar Module Area(m²) × 1000 (w/m²))] × 100%

* Module Effective Conversion Eff. (%) = [Max power at STC(w) / (Solar Cell Total Area(m²) × 1000 (w/m²))] × 100%

Thermal Characteristics

Normal Operating cell temperature	NMOT	°C	45±2
TC I _{sc}	α	%/°C	+0.073
TC V _{oc}	β	%/°C	-0.33
TC P _{max}	δ	%/°C	-0.44

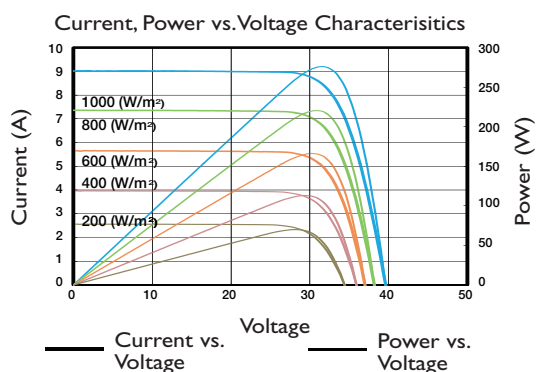
System Integration Parameters

Max. system voltage	1000V
Module fire resistance class	Class C
Application class (Safety class II)	Class A
series fuse rating	15 A
Number of bypass diodes	3
Temperature range	-40 to +85°C
Max. mechanical load	5400 Pa(VPC) 3600 Pa (IEC 61215 : 2016)

Component Material

Cell type	Monocrystalline / 156.75 × 156.75mm
Cell per module	5BB / 72 pcs
Front	Low-iron glass / Tempered
Encapsulant Film	Ethylene Vinyl Acetate(EVA)
Rear	Backsheet
Frame	6063T5 Anodized aluminum (silver/black)
Junction Box	IP68 Type 1  Type 2
Connector	MC4 Compatible
Cable	1200mm / 12 AWG / 4mm ²

IV Curve



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* The information in this document is subject to change without notice.

* TSEC reserves the rights of final interpretation and revision of datasheet.

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