



ALPHA TOPCon Module Specification

Monocrystalline 6X24 Solar Modules

182mm Solar Cell

570Wp~605Wp



Zero light-induced degradation



Better low light response



Additional power gain



The highest Mechanical Load Test in PV Industry



Better temperature coefficient



Lower LCOE



The toughest Salt Mist Test in PV Industry

Green Energy

Made in Taiwan



Sustainable Development



ALPHA TOPCon Module Specification(182mm Solar Cell)

Monocrystalline 6X24 Solar Modules

570-605Wp



Electrical Data

Model Name	TS72-CMH-570 H1	TS72-CMH-575 H1	TS72-CMH-580 H1	TS72-CMH-585 H1	TS72-CMH-590 H1	TS72-CMH-595 H1	TS72-CMH-600 H1	TS72-CMH-605 H1
Max. power at STC	P _{max} W	570	575	580	585	590	595	600
Max. power voltage	V _{mp} V	43.76	43.94	44.13	44.31	44.49	44.66	44.85
Max. power current	I _{mp} A	13.03	13.09	13.15	13.21	13.27	13.33	13.39
Open circuit voltage	V _{oc} V	51.08	51.28	51.48	51.68	51.88	52.08	52.28
Short circuit current	I _{sc} A	13.73	13.79	13.85	13.91	13.97	14.03	14.15
Module Conversion Eff.	%	22.6%	22.8%	23.0%	23.2%	23.4%	23.6%	23.9%

* Under Standard Test Condition(1,000W/m²,25°C,AM 1.5): Power Tolerance ±3%, Voc Tolerance ±3%, Isc Tolerance ±3%
* Module Conversion Eff. (%) = [Max power at STC(w) / ((Solar Module Area(m²) x 1000 (w/m²))] x 100%

General Data

Cell type	Monocrystalline TOPCon solar cell
Cell per module	Mono-crystalline silicon TOPCon solar cell (144 pcs)
Front	PV Coated glass
Encapsulant Film	Low water vapor transmission rate (WVTR) material
Rear	Backsheet (Inner side foil black)
Frame	Composites material frame
Junction Box	IP68
Connector	EVO-2 Compatible
Cable	1500mm / 12 AWG / 4mm ²



Temperature Coefficient

Nominal Operating	NOCT	°C	45±2
Cell Temperature			
TC Isc	α	%/ °C	0.045
TC Voc	β	%/ °C	- 0.25
TC Pmax	γ	%/ °C	- 0.29

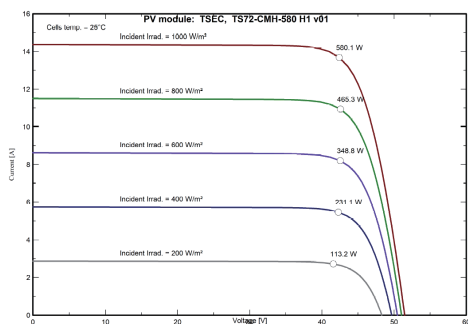
Operation Conditions

Max. system voltage	1500V
Module fire resistance class	Class C
Protection Class (IEC 61140)	Class II
Series fuse rating	30 A
Number of bypass diodes	3
Temperature range	-40 to +85°C
Max. mechanical load	5400 pa
* Please follow installation manual provided by TSEC	

Module Dimensions and Weight

Dimension	2278 x 1134 x 35 mm
Weight	27.5 Kg

IV Curve

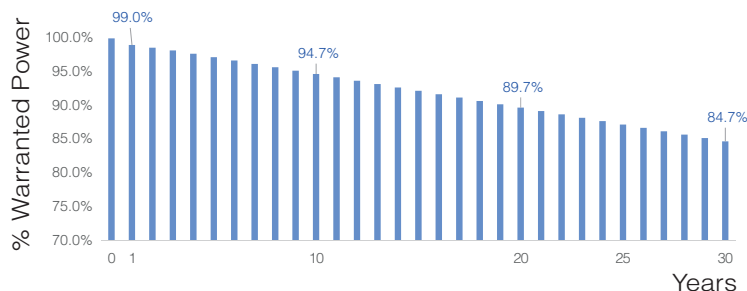
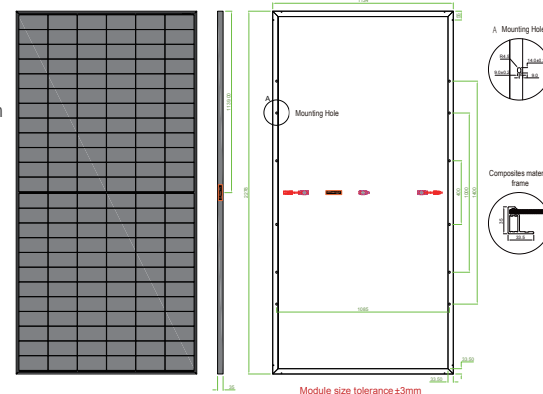


Certifications

- IEC 61215:2021 、IEC 61730-1:2021 & IEC 61730-2:2021 、UL 61730
- ISO 9001:2015 Quality management system
- ISO 14001:2015 Environmental management system
- ISO 45001:2018 Occupational health and safety management system



Engineering Drawing(mm)



Warranty

- 12-year materials and workmanship warranty
- 30-year linear power warranty

Made in Taiwan

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

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

* Version : Rev.12, March 2025

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