ALPHA N-Type High-Efficiency Bifacial Module Specification - Transparent Backsheet

Monocrystalline 6X24 Bifacial Solar Modules

570-605Wp

Electrical Data

Model			TS72-CMH-570 H2				TS72-CMH-575 H2				TS72-CMH-580 H2				TS72-CMH-585 H2				TS72-CMH-590 H2				TS72-CMH-595 H2				TS72-CMH-600 H2				TS72-CMH-605 H2			
			Front	Bifacial Gain			Front	Bifacial Gain			Front	Bifacial Gain			Front	Bifacial Gain			Front	Bifacial Gain			Front	Bifacial Gain			Front	Bifacial Gain			Front	Bifacial Gain		
				5%	10%	20%		5%	10%	20%		5%	10%	20%		5%	10%	20%		5%	10%	20%		5%	10%	20%		5%	10%	20%		5%	10%	20%
Max. power at STC	Pmax	W	570	599	627	684	575	604	633	690	580	609	638	696	585	614	644	702	590	620	649	708	595	625	655	714	600	630	660	720	605	635	666	726
Max. power voltage	Vmp	V	43.76	43.76	43.76	43.76	43.94	43.94	43.94	43.94	44.13	44.13	44.13	44.13	44.31	44.31	44.31	44.31	44.49	44.49	44.49	44.49	44.66	44.66	44.66	44.66	44.85	44.85	44.85	44.85	45.02	45.02	45.02	45.02
Max. power current	Imp	A	13.03	13.68	14.33	15.64	13.09	13.74	14.40	15.71	13.15	13.81	14.47	15.78	13.21	13.87	14.53	15.85	13.27	13.93	14.60	15.92	13.33	14.00	14.66	16.00	13.39	14.06	14.73	16.07	13.45	14.12	14.80	16.14
Open circuit voltage	Voc	V	51.08	51.08	51.08	51.08	51.28	51.28	51.28	51.28	51.48	51.48	51.48	51.48	51.68	51.68	51.68	51.68	51.88	51.88	51.88	51.88	52.08	52.08	52.08	52.08	52.28	52.28	52.28	52.28	52.48	52.48	52.48	52.48
Short circuit current	Isc	A	13.73	14.42	15.10	16.48	13.79	14.48	15.17	16.55	13.85	14.54	15.24	16.62	13.91	14.61	15.30	16.69	13.97	14.67	15.37	16.76	14.03	14.73	15.43	16.84	14.09	14.79	15.50	16.91	14.15	14.86	15.57	16.98
Module Conversion Eff.		%	22.6%	23.7%	24.8%	27.1%	22.8%	23.9%	25.0%	27.3%	23.0%	24.1%	25.3%	27.5%	23.2%	24.3%	25.5%	27.8%	23.4%	24.5%	25.7%	28.0%	23.6%	24.7%	25.9%	28.3%	23.7%	24.9%	26.1%	28.5%	23.9%	25.1%	26.3%	28.7%

* 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(㎡) x 1000 (w/㎡))] x 100%
* Backside Gain: The additional power gain obtained from the backside of the module relative to the frontside power under standard test conditions, which depends on the installation of the module (including structure, height, tilt angle, etc.) and ground reflectivity conditions.

General Data

Cell type	Monocrystalline N-Type solar cell
Cell per module	Mono-crystalline silicon N-Type solar cell (144pcs)
Front	PV Coated glass
Encapsulant Flim	Low water vapor transmission rate (WVTR) material
Rear	Backsheet
Frame	Anti-Salt Mist frame
Junction Box	IP68
Connector	EVO-2 Compatible
Cable	1500mm / 12 AWG / 4mm²

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

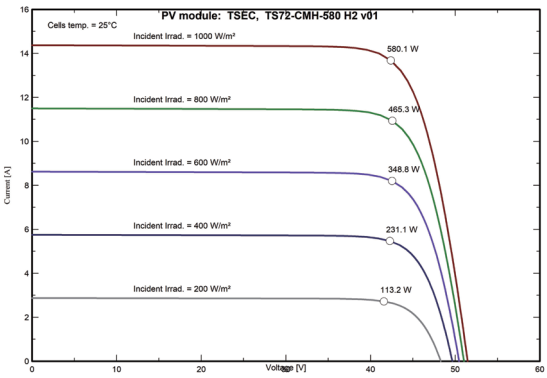
Module Dimensions and Weight

Dimension	2278 x 1134 x 35mm
Weight	27.5 Kg

Temperature Coefficient

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

IV Curve

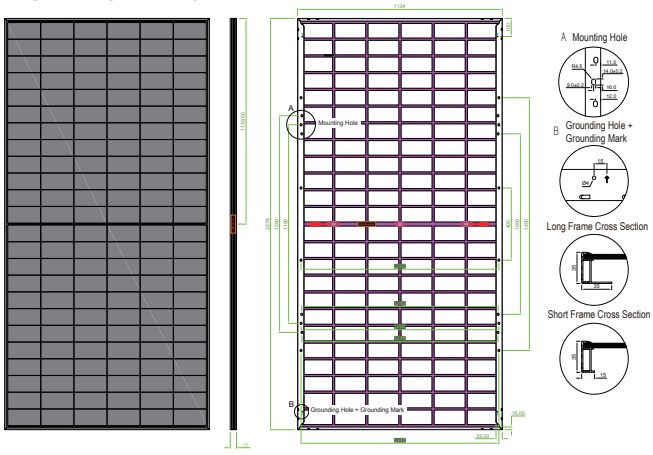


Certifications

- IEC 61215:2021、IEC 61730-1:2023& IEC 61730-2:2023、UL 61730
- ISO 9001:2015 Quality management system
- ISO 14001:2015 Environmental management system
- ISO 45001:2018 Occupational health and safety management system

Management System
ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
www.tuv.com
ID 9105065471

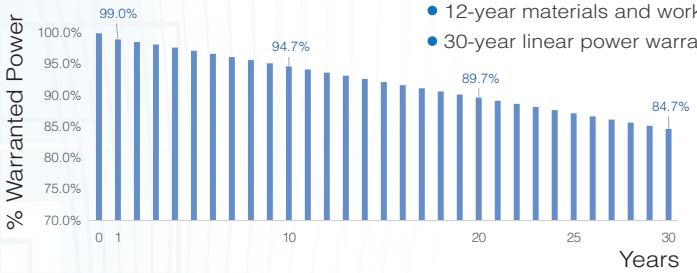
Engineering Drawing(mm)



Module size tolerance ±3mm

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.13, May 2025

TSEC Corporation

Taipei Headquarters | 8F., No.225, Sec3, Beixin Rd., Xindian Dist., New Taipei City 23143, Taiwan, R.O.C

T +886-2-2912-2199 F +886-2-2917-5399 M international.sales@tsecpv.com(Sales Contact) epc@tsecpv.com(EPC Construction Service)