



ALPHA PRO N-Type High-Efficiency Bifacial Module Specification - Bifacial glass-glass

Monocrystalline 6X24 Bifacial Solar Modules

560-600Wp



Electrical Data

Model			TS72-CMH-560 H6QT	TS72-CMH-565 H6QT	TS72-CMH-570 H6QT	TS72-CMH-575 H6QT	TS72-CMH-580 H6QT	TS72-CMH-585 H6QT	TS72-CMH-590 H6QT	TS72-CMH-595 H6QT	TS72-CMH-600 H6QT
Max. power at STC	P _{max}	W	560	565	570	575	580	585	590	595	600
Max. power voltage	V _{mp}	V	41.95	42.14	42.29	42.44	42.59	42.74	42.89	43.04	43.19
Max. power current	I _{mp}	A	13.35	13.41	13.48	13.55	13.62	13.69	13.76	13.83	13.9
Open circuit voltage	V _{oc}	V	50.67	50.87	51.07	51.27	51.47	51.67	51.87	52.07	52.27
Short circuit current	I _{sc}	A	14.13	14.19	14.25	14.31	14.37	14.43	14.49	14.55	14.61
Module Conversion Eff.		%	21.6%	21.8%	22.0%	22.2%	22.4%	22.6%	22.8%	23.0%	23.2%

Electrical Data under Different Bifacial Gains (Using TS72-CMH-600 H6QT as an Example)

Bifacial Gain			5%	10%	20%
Max. power at STC	P _{max}	W	630	660	720
Max. power voltage	V _{mp}	V	43.19	43.19	43.19
Max. power current	I _{mp}	A	14.60	15.29	16.68
Open circuit voltage	V _{oc}	V	52.27	52.27	52.27
Short circuit current	I _{sc}	A	15.34	16.07	17.53
Module Conversion Eff.		%	24.3%	25.5%	27.8%

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

* 模組轉換效率(%) = [Max power at STC(w) / ((Solar Module Area(m²) × 1000 (w/m²))] × 100%

* 背面增益: 模組背面獲得的額外功率增益相對於模組在標準測試條件下正面功率的比值。這取決於模組的具體安裝條件(結構、高度、傾角等)和地面反射率情況。

* 此為初步的標準測試條件(STC)效能。最終數據有可能會變更。

General Data

Cell type	Monocrystalline N-Type solar cell
Cell per module	Mono-crystalline silicon N-Type solar cell (144pcs)
Front	2.0 mm, AR-coating, semi-tempered
Encapsulant Film	POE/EVA
Rear	2.0 mm, semi-tempered
Frame	6005 T6 Anodized aluminum
Junction Box	IP/68
Connector	EVO-2 Compatible
Cable	(+)-300mm,(-) 200mm or customized length / 4mr ²

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	

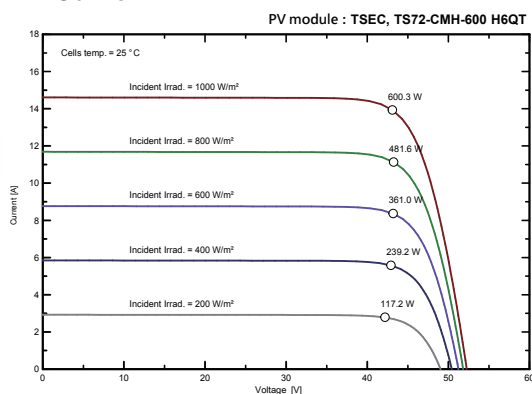
Module Dimensions and Weight

Dimension	2278 x 1134 x 30 mm
Weight(2.0+2.0mm glass)	32.6 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

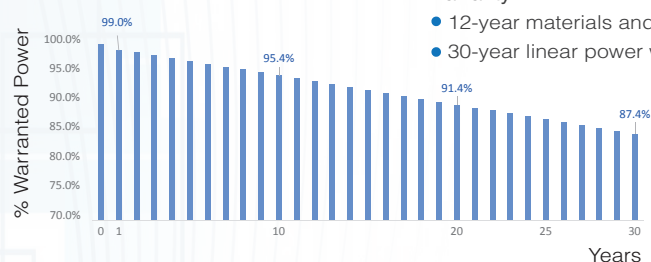
- IEC 61215:2021、IEC 61730-1:2023 & IEC 61730-2:2023、UL 61730
- ISO 9001:2015 Quality management system
- ISO 14001:2015 Environmental management system
- ISO 45001:2018 Occupational health and safety management system



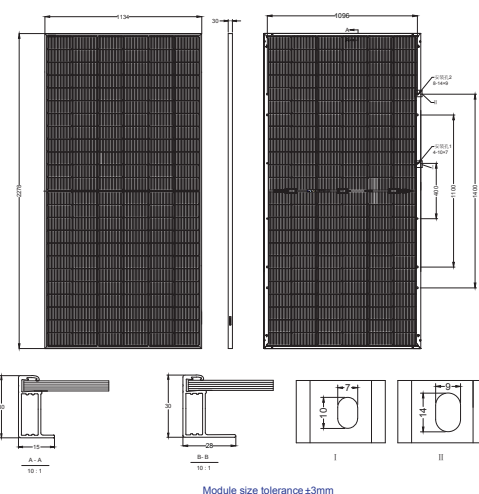
★ Certification is in progress

Warranty

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



Engineering Drawing(mm)



★ The temporary data sheet is still under development.

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.3, June 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)