QUANTUM TOPCon T Type Bifacial Module Specification - Transparent Backsheet

Monocrystalline 6X22 Bifacial Solar Modules (182mm Solar Cell)

525-550Wp

Electrical Data

Model			TS66-CMH-525 H2				TS66-CMH-530 H2				TS66-CMH-535 H2				TS66-CMH-540 H2				TS66-CMH-545 H2				TS66-CMH-550 H2			
			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%
Max. power at STC	Pmax	W	525	551	578	630	530	557	583	636	535	562	589	642	540	567	594	648	545	572	600	654	550	578	605	660
Max. power voltage	Vmp	V	40.25	40.25	40.25	40.25	40.43	40.43	40.43	40.43	40.52	40.52	40.52	40.52	40.64	40.64	40.64	40.64	40.78	40.78	40.78	40.78	40.92	40.92	40.92	40.92
Max. power current	Imp	A	13.05	13.70	14.36	15.66	13.13	13.79	14.44	15.76	13.21	13.87	14.53	15.85	13.29	13.95	14.62	15.95	13.37	14.04	14.71	16.04	13.45	14.12	14.80	16.14
Open circuit voltage	Voc	V	46.78	46.78	46.78	46.78	46.97	46.97	46.97	46.97	47.16	47.16	47.16	47.16	47.35	47.35	47.35	47.35	47.54	47.54	47.54	47.54	47.73	47.73	47.73	47.73
Short circuit current	Isc	A	13.74	14.43	15.11	16.49	13.83	14.52	15.21	16.60	13.92	14.62	15.31	16.70	14.01	14.71	15.41	16.81	14.10	14.81	15.51	16.92	14.19	14.90	15.61	17.03
Module Conversion Eff.		%	22.1%	23.2%	24.3%	26.5%	22.3%	23.4%	24.6%	26.8%	22.5%	23.7%	24.8%	27.0%	22.8%	23.9%	25.0%	27.3%	23.0%	24.1%	25.3%	27.6%	23.2%	24.3%	25.5%	27.8%

* 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) x 1000 (w/m²))] 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 TOPCon solar cell
Cell per module	Mono-crystalline silicon TOPCon solar cell (132pcs)
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

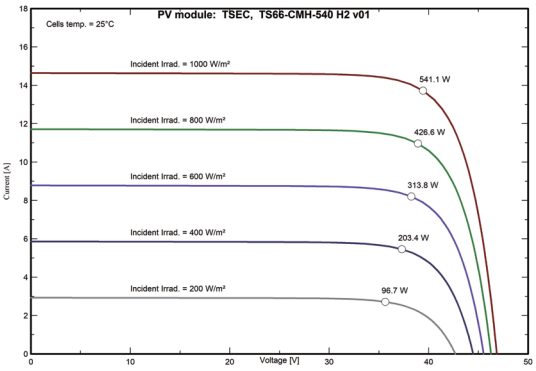
Module Dimensions and Weight

Dimension	2093 x 1134 x 35mm
Weight	25.5 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
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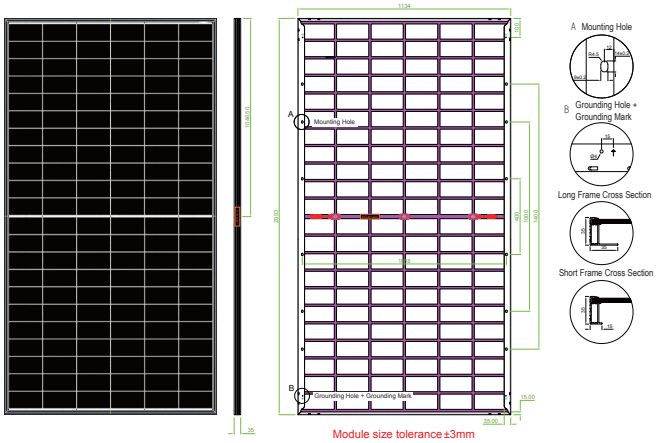
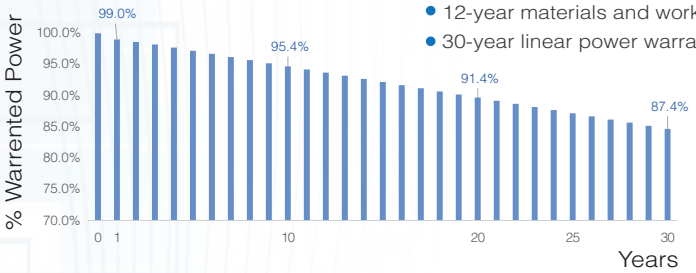
ID 9105065471

Engineering Drawing(mm)



Warranty

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



Made in Taiwan

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* Version : Rev.11, November 2024

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