

TCL 210

TCL-MG700~725DT210-68NS

TOPCon Shingled Bifacial High Efficiency PV Module

PRODUCT FEATURES



HIGH ENERGY YIELD

- High-density cell package, increasing 2% cells
- Lower temperature coefficient (Pmax): $-0.29\%/^{\circ}\text{C}$
- Up to 80% power bifaciality



INDUSTRY-LEADING G12 WAFER

- $<1\%$ degradation in the first year
- Smaller wafer chamfer, larger light receiving area
- Wafer: 210, Thickness: $\leq 130\mu\text{m}$



SUPERIOR CUSTOMER VALUE

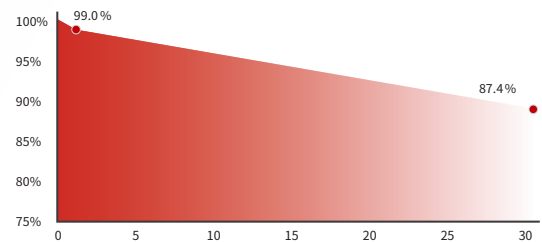
- Integrated technology: TOPCon + Shingling
- High module efficiency, Lower LCOE&BOS
- More artistic beauty with no-gap design



LONG-TERM RELIABILITY

- 1/3 cell technology, lower current loss and hot spot risk
- Harsh environment resistance
- Damage-free laser cutting, lower micro-crack risk
- Mechanical load: Front 5400 Pa, Back 2400 Pa

LINEAR PERFORMANCE WARRANTY



15 YEARS product warranty



30 YEARS linear power warranty



0.40% Linear attenuation of 0.40% per year within 30 years

CERTIFICATES

- IEC 61215/IEC 61730
- ISO 9001:2015
- ISO 45001:2018
- ISO 14001:2015



Electrical Parameters (STC*)

Maximum Power	Pmax (W)	700	705	710	715	720	725
Open Circuit Voltage	Voc (V)	48.90	49.10	49.30	49.40	49.50	49.60
Short Circuit Current	Isc (A)	17.88	17.92	17.96	17.97	17.98	17.99
Maximum Power Voltage	Vmp (V)	41.40	41.60	41.80	42.00	42.20	42.40
Maximum Power Current	Imp (A)	16.92	16.96	17.00	17.03	17.07	17.11
Module Efficiency	(%)	22.3	22.4	22.6	22.7	22.9	23.1

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5, Measuring Tolerance: +2%

Electrical Characteristics with 10% Bifacial Gain*

Maximum Power	Pmax (W)	770	776	781	787	792	798
Open Circuit Voltage	Voc (V)	48.90	49.10	49.30	49.40	49.50	49.60
Short Circuit Current	Isc (A)	19.67	19.71	19.76	19.77	19.78	19.79
Maximum Power Voltage	Vmp (V)	41.40	41.60	41.80	42.00	42.20	42.40
Maximum Power Current	Imp (A)	18.61	18.66	18.70	18.73	18.78	18.82

* The additional gain from the back side depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

Mechanical Data

No. of Cells	204pcs (6×34)
Dimension	2413×1303×33mm
Weight	38.4kg
Front Glass	2.0mm High Transmission, Heat Strengthened Glass
Back Glass	2.0mm Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68
Cables	4.0mm ² , +350mm, -280mm/±1400mm (can be customized)
Diodes	3
Maximum Static Load	Front: 5400Pa/Back: 2400Pa*
Connector	MC4 EVO2 & Compatible

Temperature Coefficient

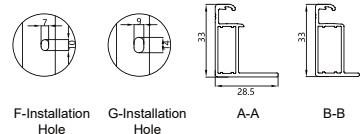
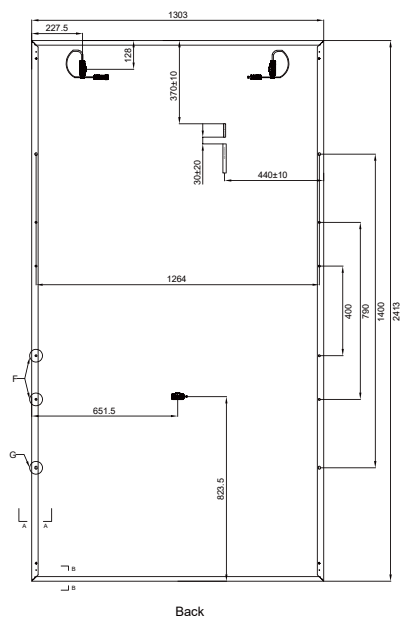
Nominal Module Operating Temperature*	43±2°C
Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operating Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	35A
Power Bifaciality	80±5%

* NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Packaging Configuration

Modules per Pallet	33pcs
Modules per 40'HQ Container	594pcs
Pallets per 40'HQ Container	18plt

Module Dimensions (mm)



I-V Curves

