

COTECH SOLAR · TOPCon

CSTB132-700~725

N-Type 210mm TOPCon Bifacial Dual-Glass Module · 132 half-cells

725 _{Wp}

MAXIMUM
POWER OUTPUT

23.3 %

MAXIMUM
EFFICIENCY

High customer value

- N-type i-TOPCon bifacial dual-glass module
- Compatible with mainstream inverters & mounting systems
- Mechanical load up to 5400 Pa front / 2400 Pa rear
- Lower BOS cost and lifetime LCOE

High efficiency & power

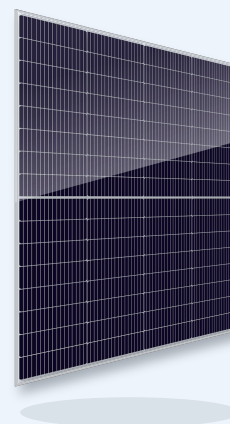
- Up to 23.3% module efficiency
- OBB / SMBB low-resistance cell interconnection
- Excellent performance under low irradiance

High reliability & yield

- 15-year product & 30-year linear power warranty
- Resistant to PID, salt mist and ammonia; low LID / LeTID
- Low temperature coefficient $-0.29\%/^{\circ}\text{C}$ · up to $80 \pm 5\%$ bifaciality

Key specifications

Maximum power	700 – 725 Wp
Module efficiency	up to 23.3 %
Open-circuit voltage	47.60 – 48.60 V
Cell type	N-type TOPCon mono, 210mm
No. of cells	132 (6×22) half-cut
Dimensions (mm)	2384 × 1303 × 33
Weight	38.3 kg
Bifaciality	80 ± 5%



N-Type TOPCon

low LID / LeTID

Bifacial

$80 \pm 5\%$

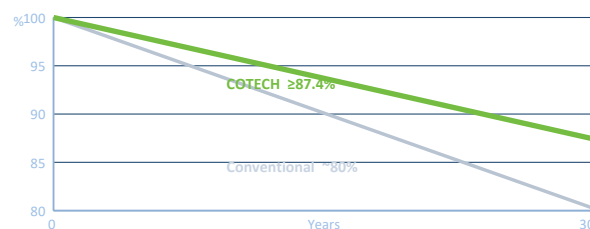
OBB · SMBB

higher energy yield

Glass · Glass

dual-glass

PERFORMANCE WARRANTY



15-yr product

30-yr power

QUALITY ASSURANCE



EL & flash tested

100% inspected, binned & traceable

APPLICATIONS



Residential



C & I



Utility



Off-grid

QUALITY SYSTEM

ISO 9001

ISO 14001

ISO 45001

CERTIFICATION & QUALIFICATION

IEC 61215

IEC 61730

IEC 61701

IEC 62716

UL 61730

CE

TÜV

ISO 9001/14001/45001

TESTED

✓ Damp heat

✓ Thermal cycling

✓ Humidity-freeze

✓ PID

✓ Salt mist

✓ Ammonia

✓ Mechanical load

✓ Hail

Electrical characteristics at STC

Parameter	700	705	710	715	720	725
Maximum power P_{max} (W)	700	705	710	715	720	725
Open-circuit voltage V_{oc} (V)	47.60	47.80	48.00	48.20	48.40	48.60
Short-circuit current I_{sc} (A)	18.20	18.29	18.38	18.47	18.56	18.65
Voltage at P_{max} V_{mp} (V)	39.80	39.94	40.08	40.22	40.36	40.50
Current at P_{max} I_{mp} (A)	17.59	17.65	17.71	17.78	17.84	17.90
Module efficiency η_m (%)	22.53	22.70	22.86	23.02	23.18	23.34

Electrical characteristics at NMOT

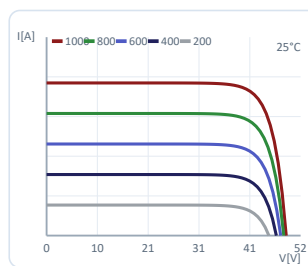
Parameter	700	705	710	715	720	725
Maximum power P_{max} (W)	528.5	532.3	536.0	539.8	543.6	547.4
Open-circuit voltage V_{oc} (V)	44.36	44.55	44.74	44.92	45.11	45.30
Short-circuit current I_{sc} (A)	14.60	14.67	14.74	14.81	14.89	14.96
Voltage at P_{max} V_{mp} (V)	36.93	37.06	37.19	37.32	37.45	37.58
Current at P_{max} I_{mp} (A)	13.95	14.00	14.04	14.10	14.15	14.19

STC 1000 W/m² · 25 °C · AM1.5 — NMOT 800 W/m² · 20 °C · AM1.5 · 1 m/s — Power tolerance 0 ~ +3 %

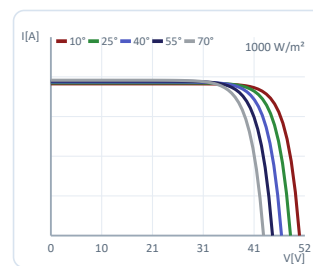
Parameter	Value
Solar cell	N-type TOPCon mono, 210mm
Cell size	210 × 105 mm
No. of cells	132 (6×22) half-cut
Busbar	0BB · SMBB
Dimensions	2384 × 1303 × 33 mm
Weight	38.3 kg
Front / back glass	2.0 mm / 2.0 mm tempered, AR coated
Encapsulant	POE
Frame	Anodized aluminium alloy, 33 mm
Junction box	IP68, 3 bypass diodes
Connector	MC4-compatible · EVO2
Output cable	4 mm ² , 400/200 mm

Parameter	Value
NMOT	43 ± 2 °C
Temp. coeff. of P_{max}	-0.29 %/°C
Temp. coeff. of V_{oc}	-0.25 %/°C
Temp. coeff. of I_{sc}	+0.045 %/°C
Operating temperature	-40 °C ~ +85 °C

I-V curve · irradiance



I-V curve · temperature



Bifacial gain & coefficients

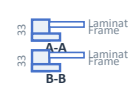
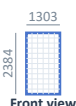
 ϕV_{oc} 98 ± 5% ϕI_{sc} 80 ± 5% ϕP_{max} 80 ± 5%

Rear gain	+0%	+10%	+20%	+25%
P_{max} (W)	725	798	870	906
I_{sc} (A)	18.65	20.52	22.38	23.31

Maximum ratings

Parameter	Value
Max system voltage	1500 V DC (IEC/UL)
Max series fuse	30 A
Max test load (front / back)	5400 Pa / 2400 Pa
Application / safety class	Class A / Class II
Fire rating	Class C

Mechanical drawing (mm)

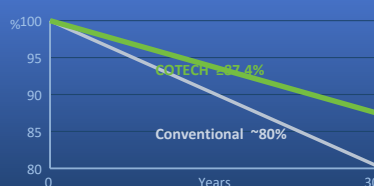


Linear power warranty

15 yr product warranty

30 yr linear power output warranty

1st-year ≤1% · annual ≤0.4% · ≥87.4% at year 30



Packaging

Pieces / pallet	31
Pieces / 20'GP	124
Pieces / 40'HC	620
Pallet size	2450 × 1320 × 1200 mm