



600W - 630W N-TOPCon Module

132 Half-Cut Monocrystalline Cells | 1500V DC System Voltage | Bifacial Dual Glass Architecture

630Wp

MAX POWER

23.32%

MAX EFFICIENCY

1500V

DC VOLTAGE

30 Yrs

POWER
WARRANTY



KEY TECHNOLOGICAL ADVANTAGES

Higher Power Output

Module power increases by 5-25% from bifacial gain, significantly lowering Levelized Cost of Energy (LCOE) and boosting project IRR.

N-TOPCon Multi-Busbar

Optimized optical utilization and carrier transport; cell efficiency exceeds 25.5% with lower resistive losses under high temperatures.

Tropical Anti-PID Durability

Superb Anti-PID performance certified against high humidity and temperature; optimized for Bangladesh and South Asian monsoon climates.

30-Year Linear Warranty

≤1.0% first-year degradation, ≤0.40% annual degradation thereafter; guaranteed ≥87.4% nominal power output at Year 30.

MECHANICAL CHARACTERISTICS

Cell Type	N-TOPCon Monocrystalline (182×91 mm)
Cell Layout	132 Cells (2 × 66 half-cut)
Dimensions	2382 × 1134 × 30 mm
Weight	33.0 kg (±3%)
Front / Rear Glass	2.0mm High Transmission AR Coated Dual Glass
Frame	Anodized Aluminum Alloy (Silver / Black)
Junction Box	IP68 Rated with 3 Bypass Diodes
Output Cables	4.0mm ² , (+)300mm / (-)200mm, MC4 Compatible

TEMPERATURE RATINGS & PACKAGING

Temp. Coeff. of Pmax	-0.30% / °C
Temp. Coeff. of Voc	-0.25% / °C
Temp. Coeff. of Isc	+0.046% / °C
Nominal Module Temp (NMOT)	43 ± 2 °C
Mechanical Load Test	Front 5400 Pa / Rear 2400 Pa
Packaging Configuration	36 pcs / Pallet
Per 40'HQ Container	720 pcs / 20 Pallets
Gross Weight / Pallet	1225 kg

Quality Compliance & Standards:

IEC
61215

IEC
61730

IEC 61701
(Salt Mist)

IEC 62716
(Ammonia)

CE

TUV
NORD

ISO 9001 /
14001



ELECTRICAL CHARACTERISTICS (STC: IRRADIANCE 1000W/M², CELL TEMP. 25°C, AM1.5)

Module Model	CHGL-600	CHGL-605	CHGL-610	CHGL-615	CHGL-620	CHGL-625	CHGL-630
Maximum Power (Pmax / Wp)	600	605	610	615	620	625	630
Open Circuit Voltage (Voc / V)	48.40	48.70	49.00	49.30	49.60	49.80	50.30
Short Circuit Current (Isc / A)	15.80	15.83	15.86	15.89	15.91	15.93	15.94
Peak Power Voltage (Vmp / V)	40.30	40.50	40.80	41.10	41.40	41.60	42.00
Peak Power Current (Imp / A)	14.91	14.94	14.96	14.98	14.99	15.00	15.01
Module Efficiency (η / %)	22.20%	22.40%	22.60%	22.80%	23.00%	23.10%	23.32%
Power Output Tolerance	0 ~ +3% (Strict Positive Tolerance)						
Maximum System Voltage	1500V DC (IEC / UL)						
Max Series Fuse Rating	30 A						
Operating Temperature	-40 °C ~ +85 °C						

BIFACIAL OUTPUT (BNPI: FRONT 1000W/M², REAR 135W/M², CELL TEMP. 25°C, AM1.5)

Rated Power (BNPI)	663.3W	667.8W	674.0W	679.8W	685.2W	688.9W	695.9W
Open Circuit Voltage (Voc / V)	48.60	48.90	49.20	49.50	49.80	49.20	50.50
Short Circuit Current (Isc / A)	17.37	17.40	17.44	17.47	17.50	17.52	17.53
Peak Power Voltage (Vmp / V)	40.50	40.70	41.00	41.30	41.60	41.80	42.20
Peak Power Current (Imp / A)	16.38	16.41	16.44	16.46	16.47	16.48	16.49
Bifaciality Factor	80% ± 5% (Substantial Energy Gain on Albedo Surface)						

WARRANTY & EPC ENGINEERING DELIVERY ASSURANCE

15-Year Product & 30-Year Power Warranty

CHINA HUACHUANG GLOBAL guarantees product materials and workmanship for 15 years, along with a 30-year linear power warranty with guaranteed minimal degradation.

Turnkey Bangladesh Engineering Support

Our dedicated Dhaka-based engineering support team handles importation, port clearance via Chittagong, on-site mechanical installation, and commissioning support.