



N-Type TOPCon Dual Glass

Elevating Excellence is Our Norm

RATED POWER 610W-630W

The Crown N-Type Bifacial Solar Panels utilize advanced silicon technology that pushes the boundaries of power generation.



N-TYPE 182210MM CELL ADOPTING THE 182210MM
N-Type TOPCon battery cells with the highest efficiency

SUPERB CORROSION RESISTANCE With anodized aluminum alloy frame resistant to salt spray and ammonia. Suitable for diverse environments.

BIFACIAL WITH DUAL GLASS Module adopts 182x210mm half cells; bifacial modules provide an additional 5%-25% output.

HARSH ENVIRONMENTAL ADAPTABILITY
Certified by TUV Nord for strict salt spray and ammonia corrosion resistance.

PID PROTECTION Strict salt spray and ammonia corrosion tests by TUV Nord.

LOW LIGHT FEATURES Higher performance under low light environments.



Comprehensive Products & System Certificates

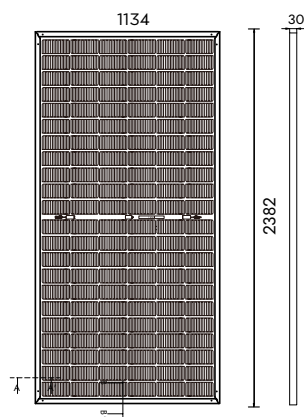
IEC 61215 / IEC 61730 / CE / INMETRO
ISO 45001
2018/international standards for occupational health & safety
ISO 14001
2015/Standards for environmental management system
ISO 9001
2015/Quality management system

CSE-BF-610~630

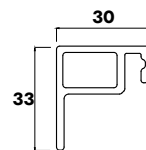
SPECIFICATIONS

Weight	34.5kg
Dimensions	2382mm*1134mm*30mm
Cell Dimensions	182*210mm
Cell Amount	66*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Front glass	2.0mm, Anti-Reflection Coating
Back glass	2.0mm, Heat Strengthened Glass
Frame	Fiberglass
Cable	4mm ² , N 1400mm/P 1400mm for Horizontal installation 4mm ² , N 300mm/P 300mm for Vertical installation
Connector	MC4 compatible
Bifaciality	80±5%

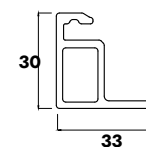
MECHANICAL DIAGRAMS



Frame Cross Section A-A



Frame Cross Section B-B



ELECTRICAL PARAMETERS AT STC

Power	610W	615W	620W	625W	630W
Open Circuit Voltage	49.05V	49.35V	49.55V	49.75V	49.95V
Short Circuit Current	15.84A	15.88A	15.93A	16.00A	16.05A
Maximum Power Voltage	40.66V	40.86V	41.06V	41.26V	41.46V
Maximum Power Current	15.00A	15.05A	15.10A	15.15A	15.20A
Module Efficiency	22.58%	22.77%	22.95%	23.14%	23.32%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

Power	465W	469W	472W	476W	480W
Open Circuit Voltage	46.51V	46.81V	47.01V	47.21V	47.41V
Short Circuit Current	12.78A	12.81A	12.84A	12.88A	12.93A
Maximum Power Voltage	38.20V	38.40V	38.60V	38.80V	39.00V
Maximum Power Current	12.17A	12.21A	12.23A	12.27A	12.31A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

ELECTRICAL PARAMETERS (AT 10% BIFACIAL POWER OUTPUT)

Output Power	671W	677W	682W	688W	693W
Open Circuit Voltage	49.05V	49.35V	49.55V	49.75V	49.95V
Short Circuit Current	17.43A	17.47A	17.52A	17.57A	17.62A
Maximum Power Voltage	40.66V	40.86V	41.06V	41.26V	41.46V
Maximum Power Current	16.50A	16.57A	16.61A	16.67A	16.71A

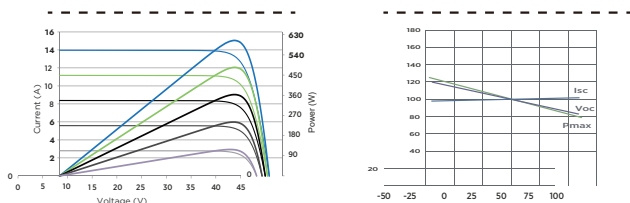
TEMPERATURE CHARACTERISTICS

NMOT	41±3°C	Temp Coefficient of ISC	+0.046%/°C
Temp Coefficient of VOC	-0.25%/°C	Temp Coefficient of Pmax	-0.30%/°C

PACKING CONFIGURATION

Modules/Pallet	36 Pieces	Modules/40'Container	720 Pieces
Packing Description	20 Pallets, Total=(36+36)x10=720 Pieces		

CHARACTERISTICS



MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A

JPEA JAPAN PHOTOVOLTAIC ENERGY ASSOCIATION
太陽光発電協会

