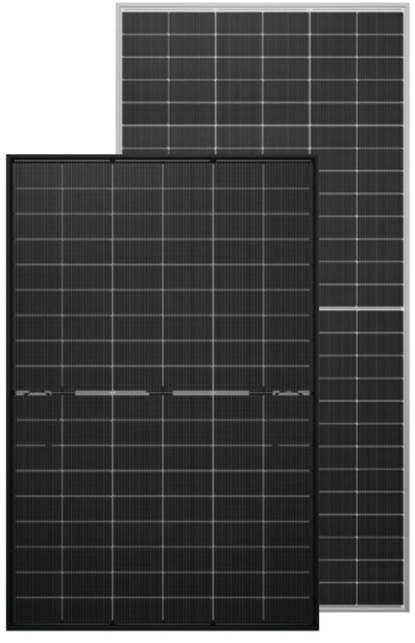
TOPCON SOLAR PANEL

Half Cell Monocrystalline Module



410W - 630W

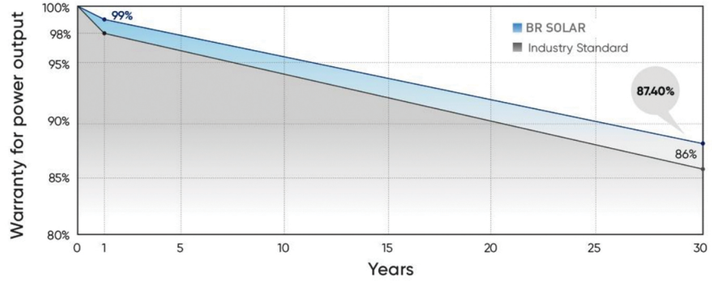
Single Glass/Bifacial Dual Glass

Silver Frame/Black Frame

Quality Guarantee

25-Year Warranty
for Materials and Processing

30-Year Warranty
for Extra Linear Power Output



10-30% Additional Power Generation

30 years lifespan brings 10- 30% additional power generation comparing with conventional P-type module.

ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation.

Higher Reliability

Adpoted lastest S-TOPCo 2.0 technology, No polysilicon wrap around, Full electrical isolation, Zero leakage current; Much Safer for roof.

Better Weak llumination Response

Higher power output even under low-light environments like on cloudy or foggy days.

Better Temperature Coefficient

Higher power generation under working conditions, thanks to passivating contact cell technology.

Quality Management System & Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt).
IEC62716 (Ammonia), IEC60068-2-68(Sand).
ISO 9001:2015/quality management system.
ISO 14001:2015/environmental management system.
ISO 45001:2018/ occupation health safety management system.
ISO 50001:2011/ energy management system.
IEC TS 62941-2016/PV industry quality management system.

Mechanical Data

Solar Cells	N-type Mono
No. of Cells	156 (6×26)
Dimensions	2465 × 1134 × 35mm
Weight	32.0kg
Front Glass	3.2mm coated tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4mm², 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
M echanical load test	5400Pa
Packaging	31pcs/box, 124pcs/20'GP, 496pcs/40'HQ

Electrical Specification (STC*)

Module Type:	BRM-610	BRM-615	BRM-620	BRM-625	BRM-630
Maximum power (Pmax/W)	610	615	620	625	630
Open Circuit Voltage (Voc/V)	55.25	55.40	55.55	55.70	55.84
Short Circuit Current (Isc/A)	14.10	14.17	14.24	14.31	14.38
Voltage at Maximum power (Vmpp/V)	45.73	45.86	45.99	46.13	46.26
Current Maximum Power (Impp/A)	13.34	13.41	13.48	13.55	13.62
MODULE EFFICIENCY (%)	21.82	22.00	22.18	22.36	22.54

Electrical Specification (NMOT*)

Maximum power (Pmax)	459	463	467	471	475
Open Circuit Voltage (Voc/V)	52.50	52.66	52.82	52.98	53.13
Short Circuit Current (Isc/A)	11.41	11.47	11.53	11.59	11.65
Voltage at Maximum power (Vmpp/V)	42.34	42.48	42.61	42.74	42.87
Current Maximum Power (Impp/A)	10.84	10.90	10.96	11.02	11.08

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m²; wind speed 1m/s , ambient temperature 20°C.
3. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximun System Voltage	1500 DC (IEC)
Maximun Series Fuse Rating	25A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.30%°C
Temperature Coefficient of Voc	-0.25%°C
Temperature Coefficient of Isc	+0.046%°C