



CARBOBEL

430 W Full Black

182mm 16BB mono 108Cells

Topcon Bifacial PV Module

All Black Glass/Glass Design



Bifaciality
>85%



SMBB
Technology
Half Cut
Topcon Cell



Excellent
performance
in low-light
environments



100% inspection,
to guarantee
the reliability of
solar systems



Lower temperature
coefficient



High quality
junction box and
connector
systems



Anti PID



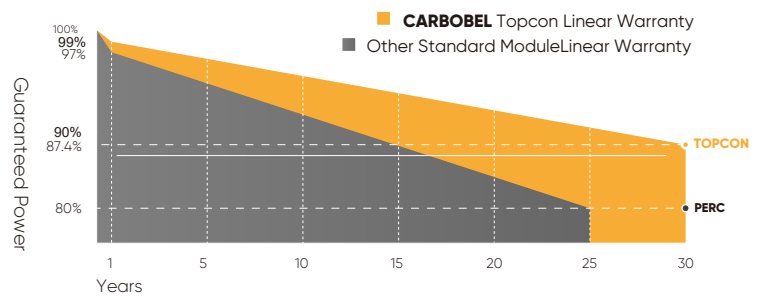
Anti LID



Quality RFID
Tracking

30 years product warranty

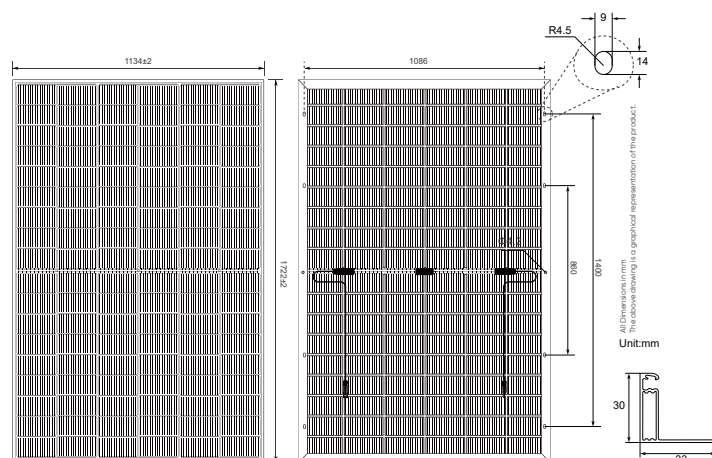
30 years performance warranty



Mechanical Specifications

External Dimensions	1722x1134x30mm
Weight	22kg
Solar Cells	Mono crystalline 182x91mm (2x54pcs)
Glass	Front ARC Solar Glass 1.6mm , Back Toughened Glass 1.6mm
Frame	Anodized aluminum alloy
Junction Box	IP68
Output Cables	4.0mm ² , 50cm(+), 50cm(-), length can be customized
Connector	MC4 Compatible
Mechanical Load	Front Side Max. 5400Pa, Rear Side Max. 2400Pa

Dimension Drawing



Electrical Characteristics (STC/NOCT)

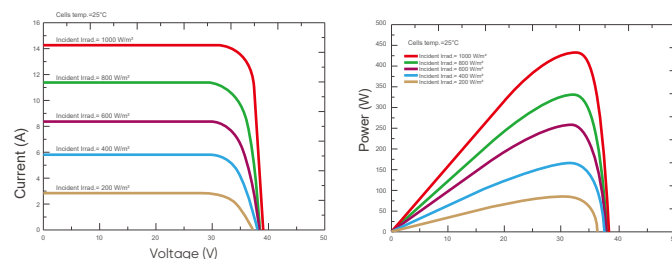
Module Type	430-FB	
	STC	NOCT
Maximum Power- Pmax(W)	430	323
Open Circuit Voltage - Voc(V)	38.49	36.56
Short- Circuit Current - Isc(A)	14.23	11.49
Voltage at Pmax - Vmp(V)	31.88	29.63
Current at Pmax - Imp(A)	13.49	10.91
Module Efficiency - ηm(%)	22.02	/
Power Tolerance(W)	(0, +4.99W)	
Maximum System Voltage(V)	1000/1500Vdc (IEC / UL)	
Maximum Series Fuse Rating (A)	25A	

STC : Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5,

NOCT : Irradiance 800W/m², Ambient Temperature 20°C,

I-V Graph

Current-Voltage & Power-Voltage Curves (RMHT54/430AB2)



Temperature Characteristics

Pmax Temperature Coefficient	-0.350%/°C
Voc Temperature Coefficient	-0.275%/°C
Isc Temperature Coefficient	+0.045%/°C
Operating Temperature	-40~+85°C
Nominal Operating Cell Temperature (NOCT)	45±2°C

Delivery information

	1722x1134x30mm
Container	40'HQ
Pieces per Pallet	36
Pallets per Container	26
Pieces per Container	936

Rear Side Power Gain

Power Gain	10%	15%	20%	25%	30%
Maximum Power- Pmax(W)	473.0	494.5	516.0	537.5	554.0
Open Circuit Voltage - Voc(V)	38.60	38.70	38.80	38.80	38.90
Short- Circuit Current - Isc(A)	15.70	16.44	17.18	17.93	18.50
Voltage at Pmax - Vmp(V)	31.70	31.60	31.60	31.60	31.50
Current at Pmax - Imp(A)	14.94	15.64	16.33	17.04	17.58

CERTIFICATIONS

