

Sun-Pursuit Plus Series

TOPCon Bifacial
96 - cell Module

TW-455HDB-1 FULL BLACK

430-455W

0-3%Positive Tolerance



Monocrystalline



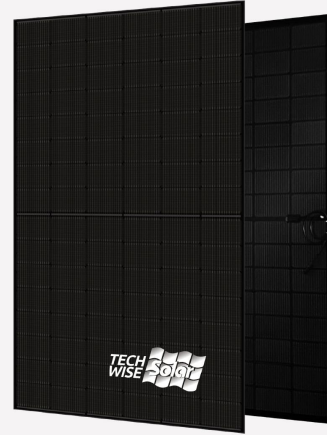
Half Cell



16BB



Grade A



• MODULE FEATURES



High efficiency

TOPCon technology improves efficiency, increases power generation, and contributes to lower LCOE.



Lower heat spot risk

Innovative circuit design and "Half Cell" structure decrease the temperature of heat spots and effectively reduce power loss.



Excellent low-light performance

Reliable performance in low-light conditions such as in the morning, at dusk or during raining days.



Resilient to extreme weather

Carefully selected materials ensure the module still works well under the condition of 2400Pa wind load and 5400Pa snow load.



PID resistant

High quality solar cell and advanced processing technology contribute to excellent PID resistance performance.



Double-sided electricity generation

Power can be generated on both sides to support additional output gains of up to 25%. The multi-busbar half-cut technology can boost energy density to deliver higher output.

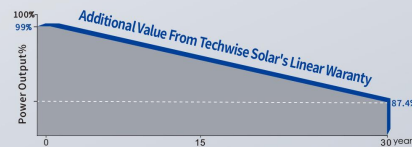
• Quality Certification



• Product Qualification



• Performance Warranty



15 15 Years Product Warranty

30 30 Years Linear Power Warranty

TW-455HDB-1

• Product Specification •

Cell Type	Mono crystalline
Cell Quantity	96 cell
Cell Size(mm)	182*105
Module Size(mm)	1762*1134*30
Module Weight (kg)	24.5
Glass Thickness(mm)	2.0
Frame Material	Anodized aluminum alloy
Junction Box	IP68
Cable/Connector	4mm ² , MC4compatible
Cable Length	+300mm/-300mm;or Customize
Max System Volt(V)	1500V DC
Max Fuse Rate(A)	30
Power Tolerance	0~+3%

• Electrical Characteristics •

STC standard performance >>>

Power Level	430	435	440	445	450	455
Pmax(W)	430	435	440	445	450	455
Vmp(V)	27.39	27.59	27.79	27.99	28.19	28.39
Imp(A)	15.70	15.77	15.84	15.90	15.97	16.03
Voc(V)	33.20	33.40	33.60	33.80	34.00	34.20
Isc(A)	16.75	16.77	16.79	16.81	16.83	16.85
Module Efficiency(%)	21.52	21.77	22.02	22.27	22.52	22.77

NOCT standard performance >>>

Power Level	430	435	440	445	450	455
Pmax(W)	324	338	332	335	339	343
Vmp(V)	25.67	25.87	26.07	26.27	26.47	26.67
Imp(A)	12.63	12.68	12.73	12.76	12.81	12.86
Voc(V)	31.48	31.68	31.88	32.08	32.28	32.48
Isc(A)	13.39	13.41	13.43	13.45	13.47	13.49

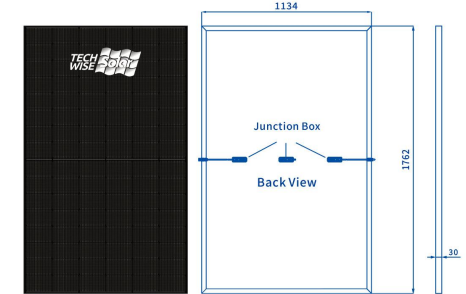
• Bifacial Output-backside Power Gain •

5%Pmax(W)	452	457	462	467	473	477
5% Module Efficiency	22.60	22.86	23.12	23.38	23.65	23.91
15% Pmax(W)	495	500	506	512	518	523
15% Module Efficiency	24.75	25.04	25.32	25.61	25.90	26.19
25% Pmax(W)	538	544	550	556	563	569
25% Module Efficiency	26.90	27.21	27.53	27.84	28.15	28.46

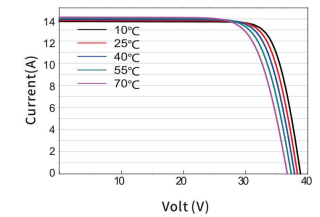
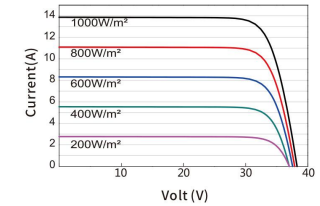
• Temperature Characteristics •

Operating Temp(°C)	-40~85
Operating Humidity(°C)	5~85
Hail Load Tolerance	25mm hailstone with velocity of 23m/s
Temp Coefficient	-0.340
Temp Coefficient Isc (%/°C)	0.04
Temp Coefficient Voc (%/°C)	-0.25
Operating Temp (°C)	44±2

• Engineering Drawings •



• I-V Curve •



• Packaging Info •

Pieces per Pallet	36
Size of Packaging(mm)	1790*1125*1270
Weight of per Pallet(kg)	907
Pieces per Container	936
Size of Container	40'HC



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