

TOPCON

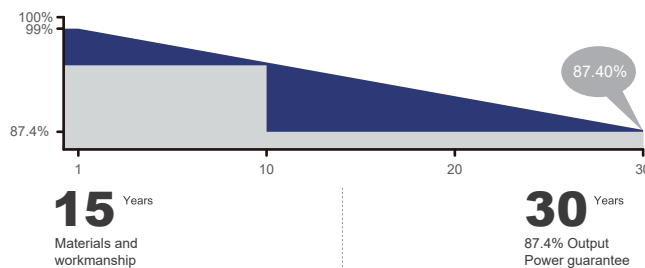
www.pvb.com
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Learn more about the products

BENY TOPCon Linear Warranty

BENY410~430M10-108D4 410~430 Watt

182mm 16BB 108Cells All Black Double Glass Bifacial
TOPCon Mono Half Cell PV Module Series



15 Years
Materials and workmanship

30 Years
87.4% Output Power guarantee



SMBB Technology
Half Cut TOPCon Cell



High Energy
Performance



100% Inspection
30years Guarantee



Fire Class A



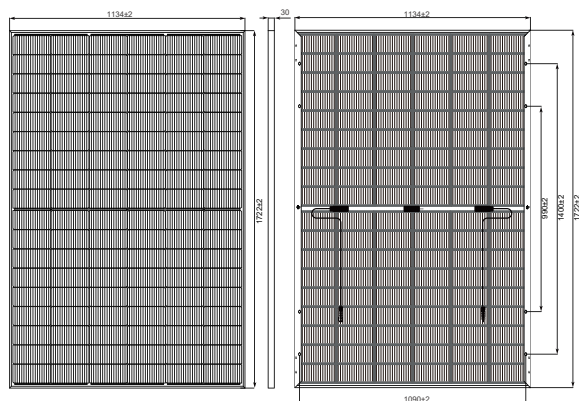
5400Pa
Strengthened
Mechanical Load



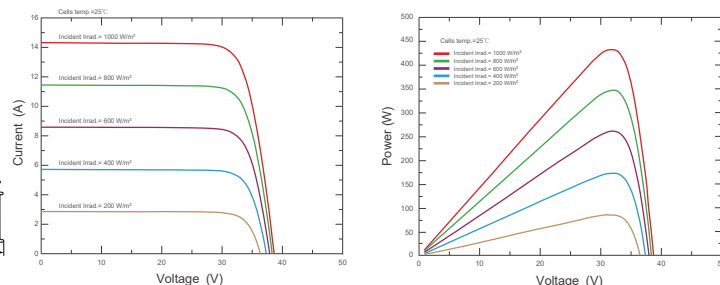
Advanced Bifacial
Efficiency



CLEAN ENERGY
FOR HOME



Current-Voltage & Power-Voltage Curves (BENY430M10-108D4)



All Dimensions in mm
The above drawing is a graphical representation of the product.
For engineering quality drawings please contact BENY.

Electrical Characteristics (STC/NOCT)

Module Type	BENY410M10-108D4		BENY415M10-108D4		BENY420M10-108D4		BENY425M10-108D4		BENY430M10-108D4	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Front Side										
Maximum Power- Pmax(W)	410	313.7	415	317.3	420	321.1	425	325.0	430	328.7
Open Circuit Voltage - Voc(V)	38.20	36.30	38.33	36.40	38.46	36.50	38.59	36.60	38.72	36.80
Short- Circuit Current - Isc(A)	13.93	11.23	14.01	11.30	14.09	11.36	14.17	11.42	14.25	11.49
Voltage at Pmax -Vmp(V)	31.60	29.60	31.79	29.71	31.97	29.90	32.15	30.01	32.34	30.19
Current at Pmax - Imp(A)	12.98	10.60	13.06	10.68	13.14	10.74	13.22	10.83	13.30	10.89
Module Efficiency -ηm(%)	21.00	/	21.30	/	21.50	/	21.80	/	22.00	/
Power Tolerance(W)	(0, +4.99W)									
Maximum System Voltage(V)	1500Vdc (IEC / UL)									
Maximum Series Fuse Rating (A)	30A									

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

NOCT : Irradiance 800W/m², Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s

Mechanical Specifications

External Dimensions	1722x1134x30mm
Weight	21kg
Solar Cells	N-Type 16BB 182mm (2x54pcs)
Front Glass	AR Coated 1.6+1.6 mm tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68
Output Cables	4.0mm², 1200mm (+),1200mm (-), length can be customized
Connector	MC4 Compatible
Mechanical Load	Front Side Max. 5400Pa, Rear Side Max. 2400Pa

Temperature Characteristics

Pmax Temperature Coefficient	-0.290%/°C
Voc Temperature Coefficient	-0.250%/°C
Isc Temperature Coefficient	+0.045%/°C
Operating Temperature	-40~+85°C
Nominal Operating Cell Temperature(NOCT)	45±2°C

Bifacial Output Rear Side Power Gain

Power Gain	5%	15%	25%
Maximum Power- Pmax(W)	441.0	483.0	525.0
Open Circuit Voltage - Voc(V)	38.50	38.50	38.60
Short- Circuit Current - Isc(A)	14.79	16.20	17.61
Voltage at Pmax -Vmp(V)	32.00	32.00	32.10
Current at Pmax - Imp(A)	13.79	15.10	16.36

Packing Configuration

	1722x1134x30mm	
Container	20'GP	40'HQ
Pieces per Pallet	36	36
Pallets per Container	6	26
Pieces per Container	216	936