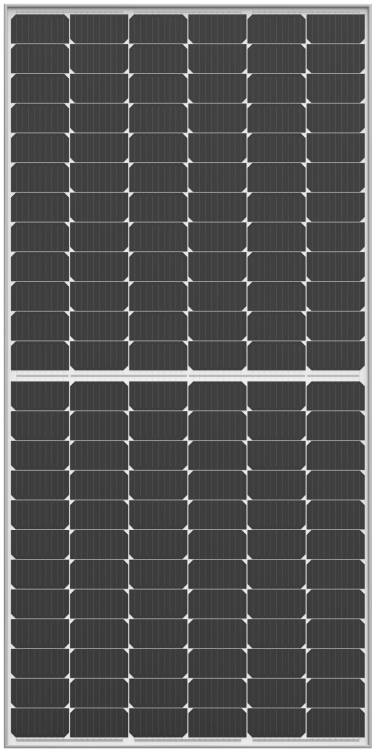
Your Module X-generation!



Yimeixu WitChip Energy Hitech Co., Ltd. is a leading supplier of intelligent solar energy system solutions. Yimeixu was founded in 2015 with registered capital of 45 million US dollars. It is located in Quzhou, Zhejiang Province, near Shanghai and occupies 84,000m². After years of practice, Yimeixu independently developed the series of “Sol y Smart” products including module-level MPPT smart optimization chip, smart optimizer, smart module and smart operation and maintenance system, which greatly reduced the cost of smart systems. Till the end of 2019, Yimeixu has accumulated total delivery over 4.0GW of mono modules.

Big Cells Half-cut Bifacial PERC Modules

High Efficiency

Low LID Bifacial PERC(166×166) With Half-cut Technology

Front side performance equivalent to conventional low LID mono PERC

High module conversion efficiency (up to 20.7%)

Better energy yield with excellent low irradiance performance and temperature coefficient

First year power degradation ＜2%

Bifacial technology enables additional energy harvesting from rear side (up to 25%)

Glass/glass lamination ensures 30 year product lifetime, with annual power degradation ＜0.45%, 1500V compatible to reduce BOS cost

35mm frame design enables easy installation and robust mechanical strength

Solid PID resistance ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss with lower operating current

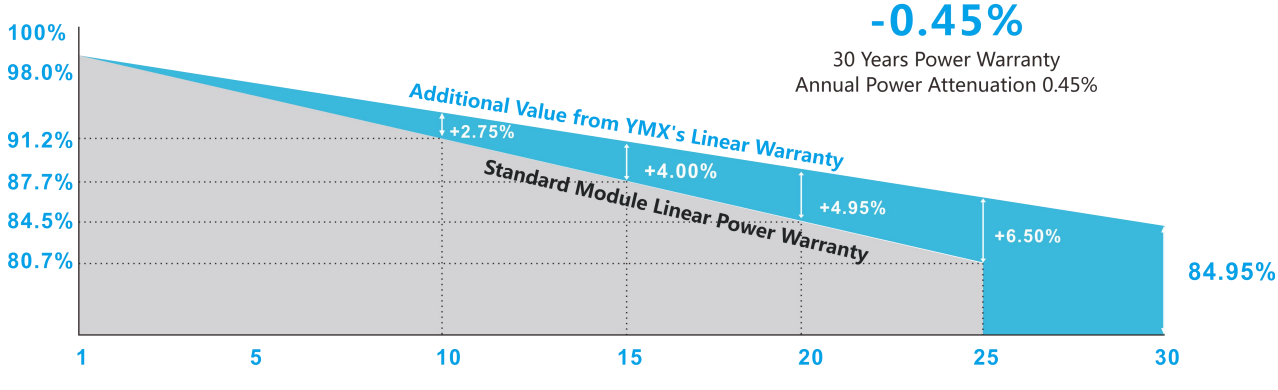
Higher energy yield with lower operating temperature

Reduced hot spot risk with optimized electrical design and lower operating current

Complete System and Product Certificates

- IEC 61215, IEC 61730, IEC 62804-1: CQC, CE, TUV, PID
- ISO 9001: 2015: ISO Quality Management System
- ISO 14001: 2015: ISO Environment Management System
- OHSAS 18001: Occupational Health and Safety Management System

12-year Warranty for Materials and Processing, 30-year Warranty for Linear Power Output



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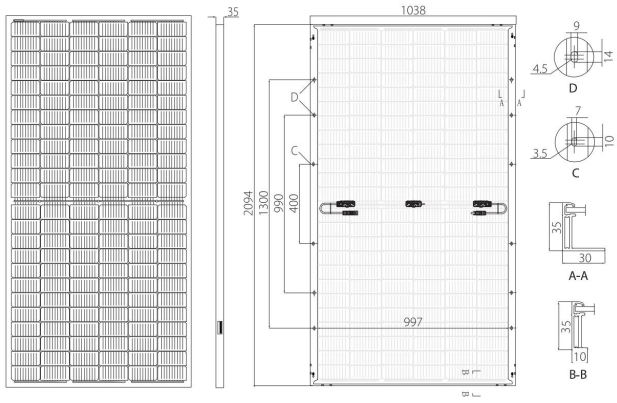
YMX

YMX-72HBD-425~450M

Design (unit: mm)



Mechanical Parameters

- Number of cells: 144 (6×24)
- Junction Box: IP68, 3 diodes
- Output Cable: 4mm², 300mm in length, length can be customized
- Connector: MC4 or compatible with MC4
- Glass: Dual Glass 2.0mm tempered glass
- Weight: 27.5kg
- Dimension: 2094×1038×35mm
- Packaging: 30pcs per pallet, 150pcs/20'GP, 660pcs/40'HC

Operating Parameters

- Operating Temperature: -40℃~ +85℃
- Power Tolerance: 0 ~ +5W
- Voc and Isc Tolerance: ±3%
- Max System Voltage: DC1500V (IEC)
- Maximum Series Fuse: 20A
- NOCT: 45±2℃
- Safety Class: Class II
- Bifaciality: Glazing 70±5%

Electrical Characteristics

Test uncertainty for Pmax: ±3%

Module Type	YMX-72HBD-425M		YMX-72HBD-430M		YMX-72HBD-435M		YMX-72HBD-440M		YMX-72HBD-445M		YMX-72HBD-450M	
Test Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	425	317.4	430	321.1	435	324.9	440	328.6	445	332.3	450	336.1
Open Circuit Voltage(Voc/V)	48.7	45.6	48.9	45.8	49.1	45.9	49.2	46.0	49.4	46.2	49.6	46.4
Short Circuit Current(Isc/A)	11.22	9.06	11.30	9.13	11.36	9.18	11.45	9.25	11.52	9.30	11.58	9.36
Maximum Power Voltage(Vmp/V)	40.4	37.7	40.6	37.9	40.8	38.0	41.0	38.2	41.2	38.4	41.4	38.6
Maximum Power Current(Imp/A)	10.52	8.42	10.60	8.49	10.66	8.54	10.73	8.60	10.80	8.65	10.87	8.70
Module Efficiency(%)	19.6	/	19.8	/	20.0	/	20.2	/	20.5	/	20.7	/

STC (Standard Testing Condition): Irradiance 1000W/m², Cell Temperature 25℃, Air Mass 1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20℃, Air Mass 1.5, Wind Speed 1m/s

Electrical characteristics with different rear side power gain（reference to 445W front）

Pmax (W)	Voc (V)	Isc (A)	Vmp (V)	Imp (A)	Pmax gain
467	49.4	12.09	41.2	11.34	5%
490	49.4	12.67	41.2	11.88	10%
512	49.5	13.24	41.3	12.42	15%
534	49.5	13.82	41.3	12.96	20%
556	49.5	14.40	41.3	13.50	25%

Temperature Coefficient（STC）

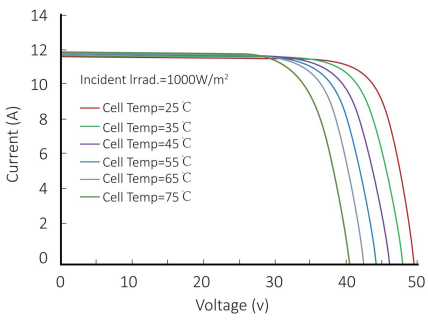
Temperature Coefficient of Isc	+0.050%/℃
Temperature Coefficient of Voc	-0.284%/℃
Temperature Coefficient of Pmax	-0.350%/℃

Mechanical Loading

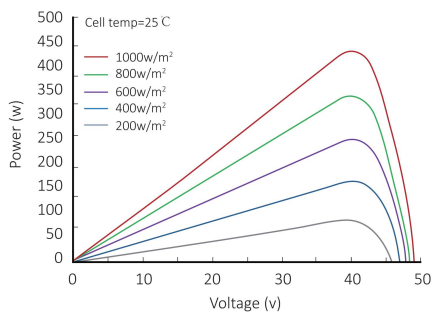
Front side Maximum Static Load (Wind or Snow)	5400Pa
Rear side Maximum Static Load (Wind)	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

I-V Curve

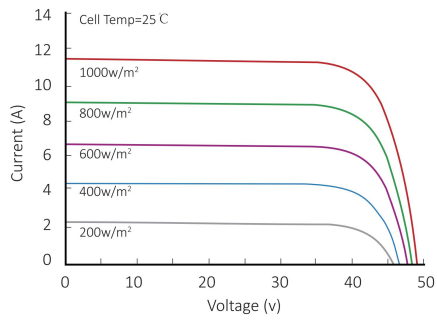
Current-Voltage Curve



Power-Voltage Curve



Current-Voltage Curve



* Note: Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. Yimeixu have the sole right to make such modification at anytime without further notice; Demanding party shall request for the latest datasheet for such as contract need, and make it a consisting and binding part of lawful documentation duly signed by both parties.

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