Axpert MAX II TWIN Off-Grid Inverter

- Increased PV power
- Touchable button with 5" color LCD
- Status indication with RGB lights
- Dual outputs for smart load management
- Upgrade maximum PV current to 60A for 12K model
- Built-in WiFi with APP for mobile monitoring and OTA firmware upgrade
- Supports USB On-the-Go function
- Built-in BMS communication port
- Built-in meter calibration for optimized system operation
- Battery independent design
- Built-in anti-dust kit
- Built-in DC output for DC fan, LED bulb, router and so on
- Parallel operation with 6 units

Axpert MAX II TWIN Off-Grid Inverter Selection Guide

MODEL	Axpert MAX II TWIN 8K	Axpert MAX II TWIN 11K	Axpert MAX II TWIN 12K
RATED POWER	8000VA/8000W	11000VA/11000W	12000VA/12000W
PARALLEL CAPABILITY	YES, 6 units		
INPUT			
Voltage	230 VAC		
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)		
Frequency Range	50 Hz/60 Hz (Auto sensing)		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%		
Surge Power	16000VA	22000VA	24000VA
Efficiency (Peak)	93%		
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)		
Waveform	Pure sine wave		
DC Voltage	12 VDC ± 5%, 100W		
BATTERY			
Battery Voltage	48 VDC	48 VDC	48 VDC
Floating Charge Voltage	54 VDC	54 VDC	54 VDC
Overcharge Protection	66 VDC	63 VDC	63 VDC
SOLAR CHARGER & AC CHARGER			
Solar Charger Type	MPPT		
Maximum PV Array Power	11000W (5500W x 2)	13000W (6500W x 2)	18000W (Max. 12000W per tracker)
MPPT Range @ Operating Voltage	90 ~ 450 VDC		
Maximum PV Array Open Circuit Voltage	500 VDC		
Maximum PV Input Current	27A x 2 (MAX 40A)		40A/27A (MAX 60A)
Maxmum Solar Charge Current	150A	150A	200A
Maximum AC Charge Current	120A	150A	200A
Maximum Charge Current	150A	150A	200A
PHYSICAL			
Dimension, D x W x H (mm)	158.4 x 503.6 x 530.8		
Net Weight (kgs)	20		
Communication Interface	USB/RS232/RS485/WiFi/Dry-contact		
OPERATING ENVIRONMENT			
Humidity	5% to 95% Relative Humidity(Non-condensing)		
Operating Temperature	-10°C to 50°C		
Storage Temperature	-15°C to 60°C		
STANDARD			
Compliance Safety	IEC 62109, IEC 61683, EN/IEC 61000-6-2, 61000-6-4, 61000-3-11, 61000-3-12		

Product specifications are subject to change without further notice.

PYLONTECH Cube the force

Residential BESS

US5000

Safety
Multi-protection from self developed BMS

Optimal Electricity Cost
Long cycle life and superior performance

Compact Size & East Installation
Module design help for quick installation

Easy to Scale Up
Be workable to be parallel based on 48V

Compatibility
Compatible with Tier 1 inverter brands

SPECIFICATION

Module		US5000	US5000-B
Basic Parameters			
Nominal Voltage (Vdc)		48	48
Nominal Capacity(Wh)		4800	4800
Depth of discharge (%)		95	95
Usable Capacity(Wh)		4560	4560
Dimension(mm)		442*420*161	442*420*161
Weight (Kg)		38	39
Discharge Voltage (V)		44.5 ~ 53.5	44.5 ~ 53.5
Charge Voltage (V)		52.5 ~ 53.5	52.5 ~ 53.5
Charge/Discharge Current (A)	Recommend	75	75
Charge/Discharge Current(A)	Max.	120@15min	120@15min
Charge/Discharge Current (A) 2	Peak 2	200@15sec	200@15sec
Communication		RS485, CAN	RS485, CAN
Configuration (max. in 1 battery group)		16pcs	16pcs
Working Temperature	Charge	0℃~55℃	0℃~55℃
Working Temperature	Discharge	-10℃~55℃	-10℃~55℃
Shelf Temperature		-20℃~60℃	-20℃~60℃
Short current/duration time		<4000A/2ms	<4000A/2ms
Cooling type		Natural	Natural
Breaker		No	Yes
IP rating of enclosure		IP20	IP20
Humidity		5% ~ 95%(RH) No Condensation	5% ~ 95%(RH) No Condensation
Altitude(M)		<4000	<4000
Certification		IEC / CE / UN38.3/UL	IEC / CE / UN38.3/UL
Design life		15+ Years (25℃/77˚F)	15+ Years (25℃/77˚F)
Cycle Life		>6,000 25℃	>6,000 25℃
Reference to standards)		IEC62619, IEC63056,CE, UN38.3,UL1973, UKCA	IEC62619, IEC63056,CE, UN38.3,UL1973, UKCA,CEC

Hi-MO 7 Preliminary

LR8-48HGD

430~455M

- Advanced HPDC cell technology delivers superior module efficiency and power
- High bifaciality and excellent power temperature coefficient achieves high energy yield
- LONGi lifecycle quality ensures long-term performance

12 12-year Warranty for Materials and Processing

30 30-year Warranty for Extra Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

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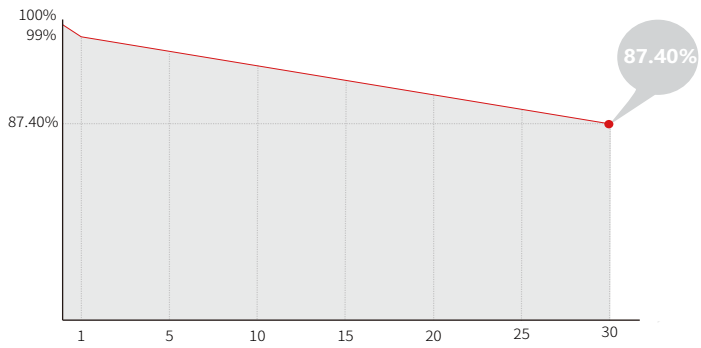
Hi-MO 7 Preliminary

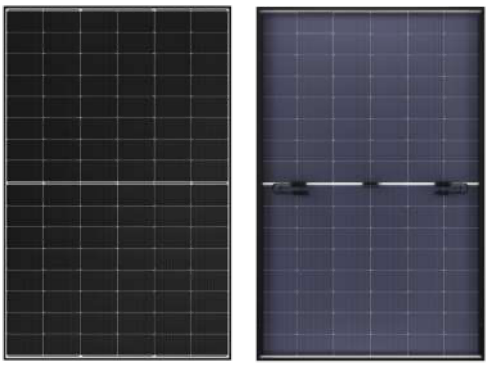
LR8-48HGD 430~455M

22.8%	0~3%	<1%	0.4%	HALF-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	LOWER OPERATING TEMPERATURE

Additional Value

30-Year Power Warranty





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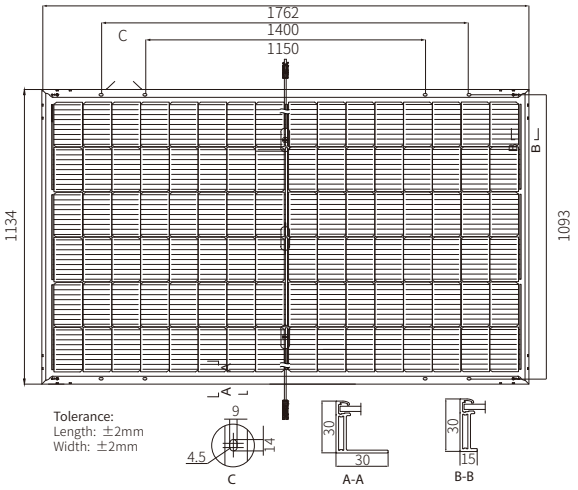

Mechanical Parameters

Cell Orientation	96 (6×16)
Junction Box	IP68, three diodes
Output Cable	4mm2, +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+1.6mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	23.0kg
Dimension	1762×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 864pcs per 40' HC

Electrical Characteristics

STC : AM1.5 1000W/m² 25°C NOCT : AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR8-48HGD-430M		LR8-48HGD-435M		LR8-48HGD-440M		LR8-48HGD-445M		LR8-48HGD-450M		LR8-48HGD-455M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	430	327.30	435	331.10	440	334.90	445	338.80	450	342.60	455	346.40
Open Circuit Voltage (Voc/V)	34.56	32.84	34.70	32.98	34.84	33.11	34.98	32.24	35.12	33.38	35.26	33.51
Short Circuit Current (Isc/A)	15.81	12.70	15.91	12.78	16.01	12.86	16.11	12.94	16.21	13.02	16.30	13.09
Voltage at Maximum Power (Vmp/V)	28.47	27.06	28.61	27.19	28.75	27.32	28.89	27.46	29.03	27.59	29.17	27.72
Current at Maximum Power (Imp/A)	15.11	12.10	15.21	12.18	15.31	12.26	15.41	12.34	15.51	12.42	15.60	12.50
Module Efficiency(%)	21.5		21.8		22.0		22.3		22.5		22.8	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	35A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifacial Rate	80±5%
Fire Rating	UL Type 38 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C

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