
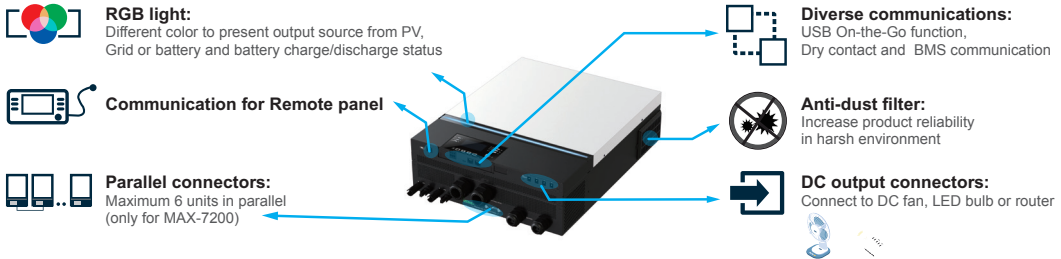


# Axpert MAX Off-Grid Inverter

OFF-GRID INVERTER



- Customizable status LED bar with RGB lights
- Built-in wifi for mobile monitoring (Android/iOS Apps are available)
- Supports USB On-the-Go function
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Replaceable fan design for ease of maintenance
- Battery independent design
- Configurable AC/PV output usage timer and prioritization
- Selectable high power charging current
- Selectable input voltage range for home appliances and personal computers
- Compatible to Utility Mains or generator input
- Built-in anti-dust kit
- Optional DC output for DC fan, LED bulb, router and so on
- Parallel operation up to 6 units only available for 7.2kVA



## Axpert MAX Off-Grid Inverter Selection Guide

MODEL	Axpert MAX 3600-24-230	Axpert MAX 7200-48-230
Rated Power	3600VA/3600W	7200VA/7200W*
PARALLEL CAPABILITY	NO	Yes, up to 6 units
<b>INPUT</b>		
Voltage	230 VAC	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	230VAC ± 5%
Surge Power	7500VA	15000VA
Efficiency (Peak)	90% ~ 93%	
Transfer Time	15 ms (For Personal Computers) ; 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
No Load Power Consumption	< 45W	< 70W
<b>BATTERY</b>		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	66 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	
Maximum PV Array Power	4000 W	8000W (4000W x 2)
MPPT Range @ Operating Voltage	120 ~ 450 VDC	90 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC	500 VDC
Maximum Solar Charge Current	80 A	
Maximum AC Charge Current	80 A	
Maximum Charge Current	80 A	
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	147.4 x 432.5 x 553.6	
Net Weight (kgs)	14.1	18.4
Communication Interface	USB/RS232/RS485/Wifi/Dry-contact	
<b>OPERATING ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	
<b>STANDARD</b>		
Compliance Safety	CE	CE

Product specifications are subject to change without further notice.

# Shingled monofacial module

# TH535~560PMB6 58SC



## Features of Module



### Shingling Technology

Innovative structure, low-temperature adhesive bonding, high-density layout.



### Beautiful Appearance

Uniform layout, better aesthetic.



### Superior Safety and Reliability

No hidden welding crack, low operating temperature, high pressure resistance.



### Low System Cost

High module efficiency, reducing system cost.



### Low Hot Spot Risk

Parallel circuit design reduces shading loss.



### Low Shading Loss

Full parallel arrangement brings high effective power generation hours.



### Eco-friendly

Adhering to green philosophy, no fluorine and low lead.

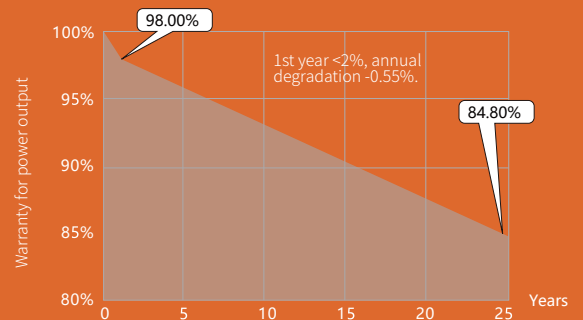
## Linear Power Output Warranty

# 15

15-year warranty for materials.

# 25

25-year warranty for linear power output.



## Quality Management System and Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt),  
IEC62716 (Ammonia), IEC60068-2-68(Sand)  
ISO 9001:2015 / quality management system  
ISO 14001:2015 / environmental management system  
ISO 45001:2018 / occupation health safety management system  
ISO 50001:2011 / energy management system  
IEC TS 62941—2016 / PV industry quality management system



### Electrical Characteristics (STC)

Module Type: TH***PMB7-46SC	560	555	550	545	540	535
Maximum Power - Pm (W)	560	555	550	545	540	535
Open Circuit Voltage - Voc (V)	47.3	47.2	47.1	47.0	46.9	46.8
Short Circuit Current-Isc [A]	15.17	15.07	14.97	14.86	14.76	14.65
Maximum Power Voltage-Vm [V]	39.3	39.2	39.1	39.0	38.9	38.8
Maximum Power Current-Im [A]	14.26	14.17	14.07	13.97	13.87	13.77
Module Efficiency-η [%]	21.4	21.2	21.0	20.9	20.7	20.5

### Electrical Characteristics at NMOT

Maximum Power-Pm [W]	422	418	414	410	407	403
Open Circuit Voltage-Voc [V]	45.1	45.0	44.9	44.8	44.7	44.6
Short Circuit Current-Isc [A]	12.22	12.14	12.06	11.97	11.89	11.80
Maximum Power Voltage-Vm [V]	37.4	37.3	37.3	37.2	37.1	37.0
Maximum Power Current-Im [A]	11.27	11.19	11.11	11.03	10.96	10.88

Note: 1. Standard Test Conditions (STC): irradiance 1000 W/m<sup>2</sup>; AM 1.5; ambient temperature 25°C according to EN 60904-3;  
 2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m<sup>2</sup>; wind speed 1m/s, ambient temperature 20°C.  
 3. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

### Mechanical Parameters

Dimensions	2384 × 1096 × 35mm
Weight	28.3kg
Front glass	tempered glass, 3.2mm
Frame	Anodized aluminum profile
Cells	Mono-crystalline solar cell
Cell Orientation	345 (69°*5)
Junction Box	IP68, three diodes
Cable	4mm <sup>2</sup> , +300mm/-1000(Vertical), +220mm/-180mm(Horizontal)
Packaging	31pcs/box; 620pcs/40'container; 868pcs/flat car

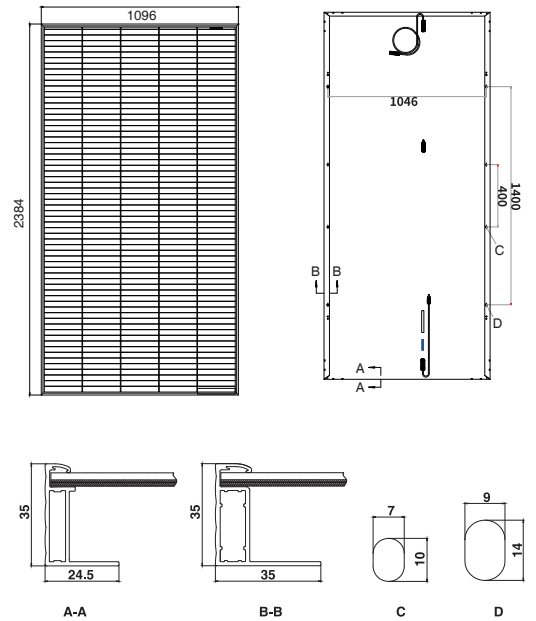
### Temperature Parameters

NMOT	42.30 °C (±2°C)
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Pm	-0.34%/°C

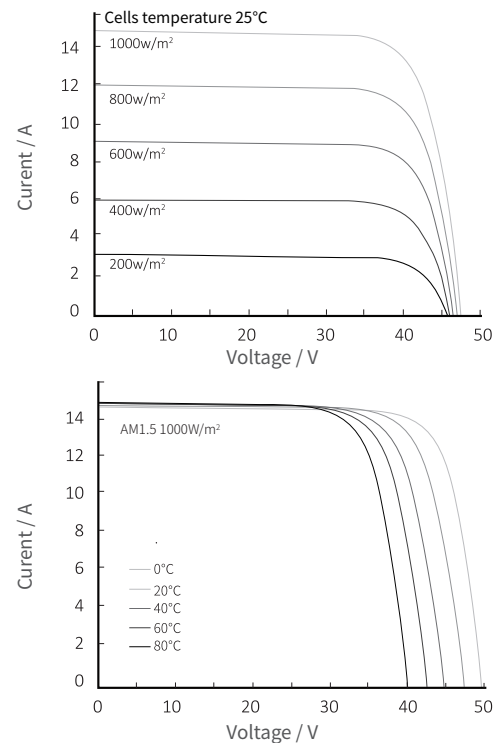
### Maximum Ratings

Maximum System Voltage [V]	DC1500 (IEC)
Series Fuse Rating [A]	25
Maximum Surface Load Capacity [Pa]	Front 5400 / Back 2400
Temperature Range [°C]	-40 ~ + 85
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 m/s

### Drawings



### I-V Curve



Declaration:  
 With the technical progress and product updates, there exists a deviation between the technical parameter of the TW Solar's future products and the technical parameter in this specification. The TW Solar reserves the right to adjust the technical parameter at any time without notifying the customers, TW Solar reserves the final right of interpretation.

## US5000

### Batteria al litio in bassa tensione

#### US5000 - Moduli da 4,8 kWh

La batteria al litio US5000 di Pylontech può essere utilizzata per supportare un'elevata potenza per vari tipi di apparecchiature e sistemi.

La batteria US5000 dispone di un BMS integrato che ha funzioni di protezione tra cui sottoscarica, sovraccarica, sovracorrente e controllo della temperatura delle celle.

#### Specifiche tecniche:

- Funzione **Soft-Start** in grado di ridurre la corrente di picco quando l'inverter si accende con la sola batteria;
- La **struttura molecolare** interna delle batterie LiFePO4 è **più stabile** e **più sicura**;
- **Profondità di scarica** (DOD ) del 95%, disponibile per gli inverter allineati all'ultimo protocollo Pylontech;
- **Doppia protezione attiva a livello BMS**;
- Possibilità di collegare in parallelo più moduli batteria per espandere la capacità e la potenza;
- Possibilità di operare in diverse condizioni di temperatura;
- **Garanzia 10 anni.**

#### Dimensioni:

Larghezza: 442 mm

Altezza: 161 mm

Profondità: 420 mm

Peso: 39,7 kg



## Dati tecnici

### Batteria al Litio

Modello	US5000
<b>DATI ELETTRICI</b>	
Tecnologia cella	Li-ion (LFP)
Tensione nominale [V]	48
Capacità nominale [kWh/Ah]	4,8 / 100
Profondità di scarica DoD [%]	95
Capacità utilizzabile [kWh/Ah]	4,56 / 95
Corrente nominale raccomandata [A]	80*
Configurazione [max. moduli in un gruppo batteria]	16 pz
Tensione di carica [V]	52,5 ~ 53,5
Tensione di scarica [V]	43,5 ~ 53,5
<b>BUS</b>	
Bus di comunicazione	RS485, CAN
<b>DIMENSIONI E PESI</b>	
Larghezza [mm]	442
Altezza [mm]	161
Profondità [mm]	420
Peso [kg]	39,7
<b>VARIE</b>	
Temperatura di esercizio in carica [°C]	0 ~ 50
Temperatura di esercizio in scarica [°C]	-10 ~ 50
Temperatura di stoccaggio [°C]	-20 ~ 45
Classe di protezione	IP20
Vita operativa a 25 °C	15+ anni
Cicli di funzionamento	>6000 25°C
Certificati trasporto merce pericolosa	TÜV / CE / UN38.3 / UL / UN 3480
Normativa EMC	IEC62619, IEC63056, UL1973, UL9540A, IEC61000-6-2, IEC61000-6-3, UN38.3, GR-1089, UN 3480, GB/T 2423

\*: La corrente massima di lavoro raccomandata è riferita alla temperatura della cella della batteria compresa tra 10 ~ 40°C. Se al di fuori di questa temperatura può causare una diminuzione della corrente di funzionamento.