

Axpert MAX 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



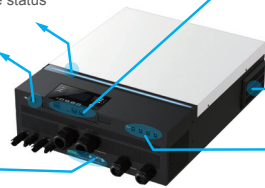
RGB light:
Different color to present output source from PV, Grid or battery and battery charge/discharge status



Communication for Remote panel



Parallel connectors:
Maximum 6 units in parallel (only for MAX-7200)



Diverse communications:
USB On-the-Go function, Dry contact and BMS communication



Anti-dust filter:
Increase product reliability in harsh environment



DC output connectors:
Connect to DC fan, LED bulb or router



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
INPUT		
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)	
OUTPUT		
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
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	66 VDC
SOLAR CHARGER & AC CHARGER		
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	
PHYSICAL		
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	
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	CE	CE

Product specifications are subject to change without further notice.

HYUNDAI SOLAR MODULE

HG SERIES

G12 PERC Shingled

HiE-S435HG HiE-S440HG HiE-S445HG



Shingled
Technology



For Both Residential
& Commercial
Applications



More Power
Generation
In Low Light



G12 PERC Shingled

G12 PERC Shingled Technology provides ultra-high efficiency with better performance in low irradiation. Maximizes installation capacity in limited space.



Anti-LID / PID

Both LID(Light Induced Degradation) and PID(Potential induced Degradation) are strictly eliminated to ensure higher actual yield during lifetime.



Mechanical Strength

Tempered glass and reinforced frame design withstand rigorous weather conditions such as heavy snow and strong wind.



Reliable Warranty

Global Brand with powerful financial strength provide reliable 25-year warranty. (Australia and Europe Only)



Corrosion Resistant

Various tests under harsh environmental conditions such as ammonia and salt-mist passed



UL / VDE Test Labs

Hyundai's R&D center is an accredited test laboratory of both UL and VDE.

Hyundai's Warranty Provisions



• **25-Year Product Warranty**
· On material and workmanship
Australia and Europe Only



• **25-Year Performance Warranty**
· Initial year: 98.0%
· Linear warranty after second year:
with 0.55%p annual degradation,
84.80% is guaranteed up to 25 years

About Hyundai Energy Solutions

Established in 1972, Hyundai Heavy Industries Group is one of the most trusted names in the heavy industries sector and is a Fortune 500 company. As a global leader and innovator, Hyundai Heavy Industries is committed to building a future growth engine by developing and investing heavily in the field of renewable energy.

As a core energy business entity of HHI, Hyundai Energy Solutions has strong pride in providing High-quality PV products to more than 3,000 customers worldwide.

Certification



HYUNDAI
ENERGY SOLUTIONS

Electrical Characteristics

		Mono-Crystalline Module (HiE-S__HG)		
		445	440	435
Nominal Output (Pmpp)	W	445	440	435
Open Circuit Voltage(Voc)	V	43.8	43.7	43.6
Short Circuit Current (Isc)	A	13.01	12.90	12.79
Voltage at Pmax (Vmpp)	V	36.4	36.3	36.2
Current at Pmax (Impp)	A	12.23	12.13	12.02
Module Efficiency	%	21.4	21.1	20.9
Cell Type	-	PERC Mono-Crystalline Silicon Shingled		
Maximum System Voltage	V	1,500		
Temperature Coefficient of Pmax	%/°C	-0.34		
Temperature Coefficient of Voc	%/°C	-0.27		
Temperature Coefficient of Isc	%/°C	0.04		

*All data at STC(Standard Test Conditions). Above data may be changed without prior notice.

*Tolerance of Pmax:0~+5W.

* Performance deviation of Voc [V], Isc [A], Vm[V] and Im[A]: ±3%.

Mechanical Characteristics

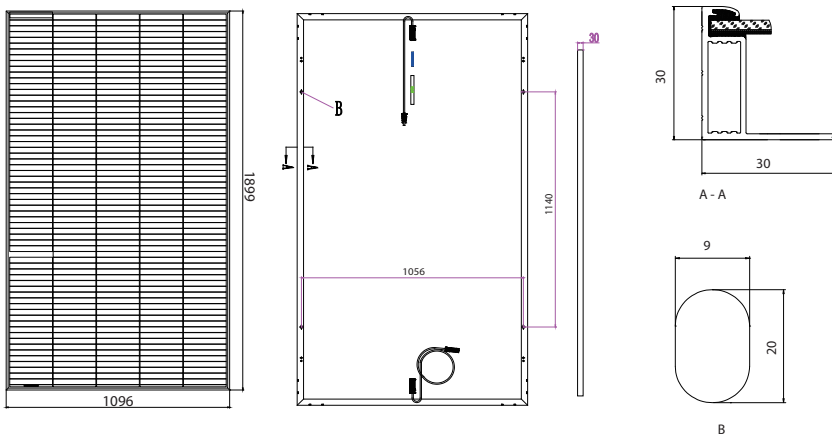
Dimensions	1,899 × 1,096 × 30 mm (L × W × H)		
Weight	21.8kg		
Solar Cells	320 Cells, PERC Mono-crystalline Shingled (210 × 210mm)		
Output Cables	4mm ² , +500mm/-1100mm(Vertical), +220mm/-180mm(Horizontal)	Connector	Stäubli : MC4-Evo2
Junction Box	IP68, TUV&UL, two diodes		
Construction	Front Glass: Tempered glass, 3.2mm Encapsulation: EVA (Ethylene-Vinyl-Acetate)		
Frame	Anodized Aluminum		

Installation Safety Guide

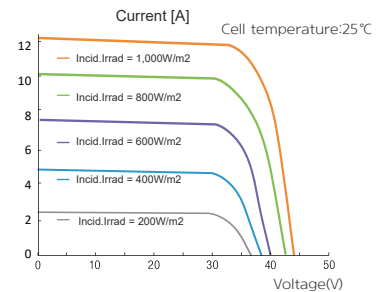
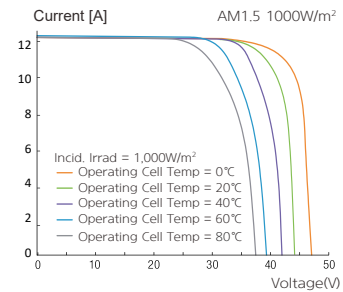
- Only qualified personnel should install or perform maintenance.
- Be aware of dangerous high DC voltage.
- Do not damage or scratch the rear surface of the module.
- Do not handle or install modules when they are wet.

Nominal Operating Cell Temperature	42.3°C (±2°C)
Operating Temperature	-40 ~ 85 °C
Maximum System Voltage	DC 1,500 / 1,000 (IEC)
Series Fuse Rating [A]	25
Maximum Surface Load Capacity	Front 5,400 Pa Rear 2,400 Pa

Module Diagram (Unit: mm)



I-V Curves



Manufactured in China

HYUNDAI
ENERGY SOLUTIONS



Sales & Marketing
sales@hyundai-es.co.kr

Printed Date : 06/2022

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
DATI ELETTRICI	
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
BUS	
Bus di comunicazione	RS485, CAN
DIMENSIONI E PESI	
Larghezza [mm]	442
Altezza [mm]	161
Profondità [mm]	420
Peso [kg]	39,7
VARIE	
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.