

Axpert VM II Premium Off-Grid Inverter

OFF-GRID INVERTER



- Pure sine wave solar inverter
- Reserved communication port for BMS
- Wide PV input range, starts from 30VDC for 1.2K/2.5K/3K-24V models
- Battery independent design
- Maximum charging current 100A
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dust kit

Axpert VM II Premium Off-Grid Inverter Selection Guide

MODEL	Axpert VM II Premium 1.2K	Axpert VM II Premium 2.5K	Axpert VM II Premium 3K-24V	Axpert VM II Premium 3K-48V	Axpert VM II Premium 5K
Rated Power	1200VA/1200W	2500VA/2500W	3000VA/3000W	3000VA/3000W	5000VA/5000W
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	2400VA	5000VA	6000VA	6000VA	10000VA
Efficiency (Peak)	93%				
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)				
Waveform	Pure sine wave				
BATTERY					
Battery Voltage	12 VDC	24 VDC			48 VDC
Floating Charge Voltage	13.5 VDC	27 VDC			54 VDC
Overcharge Protection	16 VDC	32 VDC			63 VDC
SOLAR CHARGER & AC CHARGER					
Solar Charger Type	MPPT				
Maximum PV Array Open Circuit Voltage	350 VDC		450 VDC		500 VDC
Maximum PV Array Power	2000W		3000W		5000W
Maximum PV Input Current			13A		18A
MPP Range @ Operating Voltage	30 ~ 300 VDC (30 ~ 60VDC with battery connected)		30 ~ 400 VDC (30 ~ 60VDC with battery connected)		60 ~ 400 VDC 120 ~ 450VDC
Maximum Solar Charge Current			100 A		100A
Maximum AC Charge Current		80A		60A	100A
Maximum Charge Current			100A		100A
PHYSICAL					
Dimension, D x W x H (mm)	90 x 288 x 357		110 x 288 x 390	90 x 288 x 357	120 x 300 x 440
Net Weight (kgs)	6.5	7.0	7.2	7.0	10
Communication Interface	RS232/RS485, optional WiFi				
ENVIRONMENT					
Humidity	5% to 95% Relative Humidity (Non-condensing)				
Operating Temperature	-10°C to 50°C				
Storage Temperature	-15°C to 60°C				

Product specifications are subject to change without further notice.

Tiger Neo N-type 54HL4R-(V) 430-450 Watt MONO-FACIAL MODULE

N-Type

Positive power tolerance of 0~+3%

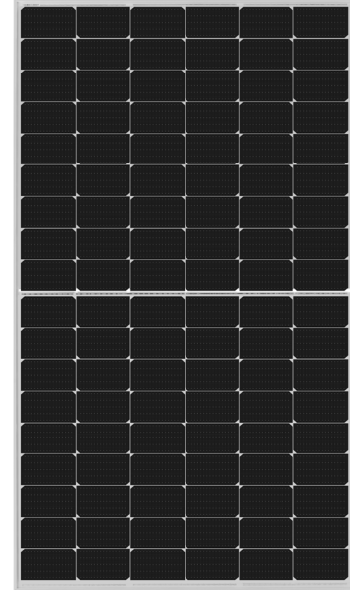
IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018

Occupational health and safety management systems



Key Features



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance.



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.

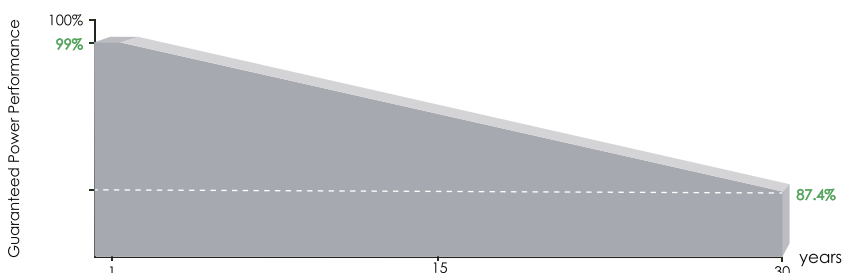


Enhanced Mechanical Load

Certified to withstand: wind load (4000 Pascal) and snow load (6000 Pascal).



LINEAR PERFORMANCE WARRANTY

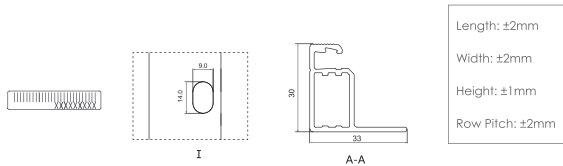
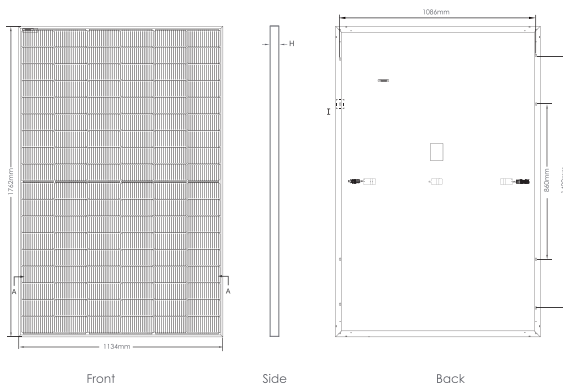


15 Year Product Warranty

30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years

Engineering Drawings

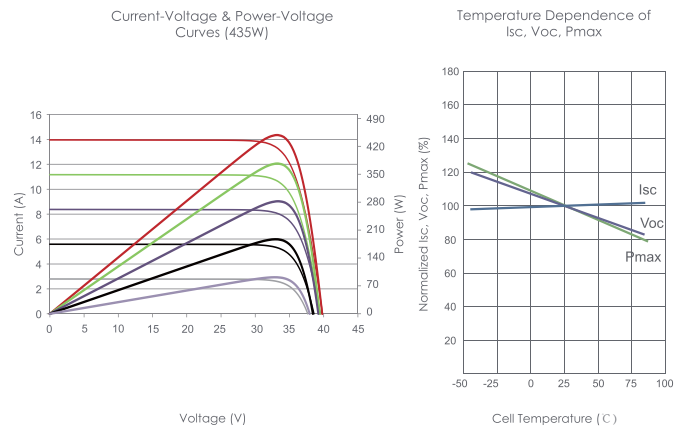


Packaging Configuration

(Two pallets = One stack)

36pcs/pallets, 72pcs/stack, 936pcs/ 40'HQ Container

Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	108 (2×54)
Dimensions	1762×1134×30mm (69.36×44.65×1.18 inch)
Weight	22 kg (48.50 lbs)
Front Glass	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 400mm , (-): 200mm or Customized Length

SPECIFICATIONS

Module Type	JKM430N-54HL4R		JKM435N-54HL4R		JKM440N-54HL4R		JKM445N-54HL4R		JKM450-54HL4R	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	430Wp	323Wp	435Wp	327Wp	440Wp	331Wp	445Wp	335Wp	450Wp	338Wp
Maximum Power Voltage (Vmp)	32.38V	30.10V	32.59V	30.33V	32.81V	30.56V	33.02V	30.76V	33.21V	30.90V
Maximum Power Current (Imp)	13.28A	10.73A	13.35A	10.78A	13.41A	10.83A	13.48A	10.89A	13.55A	10.94A
Open-circuit Voltage (Voc)	38.95V	37.00V	39.16V	37.20V	39.38V	37.41V	39.59V	37.61V	39.78V	37.79V
Short-circuit Current (Isc)	13.73A	11.09A	13.80A	11.14A	13.86A	11.19A	13.93A	11.25A	14.00A	11.30A
Module Efficiency STC (%)	21.52%		21.77%		22.02%		22.27%		22.52%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.045%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									

*STC: Irradiance 1000W/m² Cell Temperature 25°C AM=1.5
 NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

A48100

Questo modulo LFP da 4,8 kWh supporta sia l'installazione a pavimento che quella a parete. È dotato di funzione OTA per l'aggiornamento e il monitoraggio da remoto. L'utilizzo di un massimo di 30 moduli in parallelo consente di rispondere alle diverse esigenze degli utenti e assicura flessibilità di espansione.



Monitoraggio via app
(opzionale)

Monitoraggio in tempo reale
e aggiornamento da remoto



Design del modulo
Flessibilità di espansione



Metodi di installazione
diversi

Installazione a parete,
a pavimento o con
moduli impilabili



Tecnologia LFP per
un'elevata sicurezza

Monitoraggio e
bilanciamento del livello
delle celle



Ampia compatibilità
Abbinabile ai principali inverter

Specifiche tecniche

Modello

A48100

Tipo di batteria	LiFePO4
Energia nominale della batteria	4.8 kWh
Capacità nominale	100Ah
Tensione nominale	48V
Tensione di esercizio	42 ~ 54V
Velocità C di carica e scarica consigliata	0.5C
Corrente di carica e scarica consigliata	50A
Corrente di carica/scarica max	75A
Corrente di carica/scarica di picco	100A (15s)
Profondità di scarica (DOD)	95%
Peso netto	45 kg
Dimensioni [L x P x H]	504*597*155 mm
Intervallo temp. di carica	0~55 C
Intervallo temp. di scarica	-20~55 C
Comunicazione	CAN/RS485/RS232
Ciclo di vita ^[1]	≥6000 Ciclos
Livello di protezione	IP20
Espandibilità	Fino a 30 unità in parallelo
Vantaggi	Può essere utilizzato sia in configurazioni off-grid che ibride, design compatto
Certificazioni e standard di sicurezza	UN38.3/CE-EMC/IEC62619/IEC60730/CEI-021/GOST-R/UKCA
Inverter compatibili	SMA/Victron/Ingeteam/Delios/Goodwe/Solis /Deye/SAJ/Voltronic/Sungrow etc.

[1] Condizioni di test: carica/scarica a 0,2 C, 25 °C, 95% DOD