

# 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



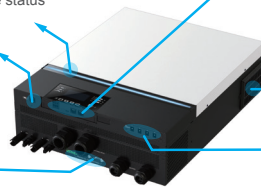
**RGB light:**  
Different color to present output source from PV, Grid or battery and battery charge/discharge status



**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 3600-24-120	Axpert MAX 7200-48-230	Axpert MAX 7200-48-120
Rated Power	3600VA/3600W		7200VA/7200W*	
PARALLEL CAPABILITY	NO		Yes, up to 6 units	
<b>INPUT</b>				
Voltage	230 VAC	120 VAC	230 VAC	120 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	90-140 VAC (For Personal Computers) 80-140 VAC (For Home Appliances)	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	90-140 VAC (For Personal Computers) 80-140 VAC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)			
<b>OUTPUT</b>				
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	120VAC ± 5%	230VAC ± 5%	120VAC ± 5%
Surge Power	7500VA	7500VA	15000VA	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 ~ 230 VDC	90 ~ 450 VDC	90 ~ 230 VDC
Maximum PV Array Open Circuit Voltage	500 VDC	250 VDC	500 VDC	250 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	UL	CE	UL

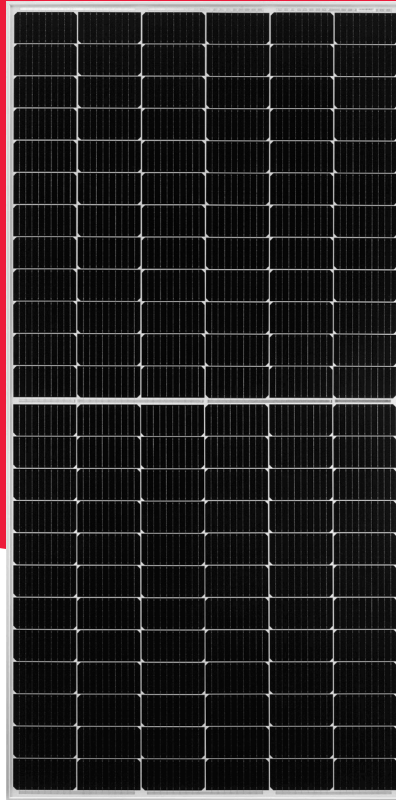
\* 120 VAC model rated as 5000VA when unit operated under invert mode  
Product specifications are subject to change without further notice.

NU-JD Series

# NU-JD440

440 W

The Project Solution



## Powerful product features



Guaranteed positive power tolerance (0/+5 %)



High module efficiency 19.9 %  
PERC monocrystalline silicon photovoltaic modules



Max. system voltage 1,500 V  
Lower BOS costs by longer strings

**9BB** 9 busbar technology  
Improved reliability  
Higher efficiency  
Reduced series resistance



Half-cut cell  
Improved shading performance  
Lower internal losses  
Reduced hot spot risk



Tested and certified  
VDE, IEC/EN61215, IEC/EN61730  
**CE**  
Safety class II, CE  
Fire rating class C



Robust product design  
PID resistance test passed  
Salt mist test passed (IEC61701)  
Ammonia test passed (IEC62716)  
Dust and sand test passed (IEC60068)

## Your solar partner for life



60 years of solar expertise



Linear power output guarantee



Product guarantee



Local support team in Europe



50 million PV modules installed



Tier 1 - BloombergNEF



Energy Solutions

**SHARP**  
Be Original.

\* Applicable for modules installed within the EU and additional listed countries.  
Please check the guarantee conditions for your area before purchasing.

## Electrical data (STC)

NU-JD440			
Maximum power	$P_{max}$	440	$W_p$
Open-circuit voltage	$V_{oc}$	49.77	V
Short-circuit current	$I_{sc}$	11.49	A
Voltage at point of maximum power	$V_{mpp}$	41.20	V
Current at point of maximum power	$I_{mpp}$	10.68	A
Module efficiency	$\eta_m$	19.9	%

STC = Standard Test Conditions: irradiance 1,000 W/m<sup>2</sup>, AM 1.5, cell temperature 25 °C.

Rated electrical characteristics are within ±10 % of the indicated values of  $I_{sc}$ ,  $V_{oc}$  and 0 to +5 % of  $P_{max}$  (power measurement tolerance ±3 %).

Reduction of efficiency from an irradiance change of 1,000 W/m<sup>2</sup> to 200 W/m<sup>2</sup> ( $T_{module} = 25$  °C) is less than 3 %.

## Electrical data (NMOT)

NU-JD440			
Maximum power	$P_{max}$	329.14	$W_p$
Open-circuit voltage	$V_{oc}$	46.07	V
Short-circuit current	$I_{sc}$	9.21	A
Voltage at point of maximum power	$V_{mpp}$	36.98	V
Current at point of maximum power	$I_{mpp}$	8.90	A

NMOT = Nominal Module Operating Temperature: 45 °C, irradiance 800 W/m<sup>2</sup>, air temperature of 20 °C, wind speed of 1 m/s.

## Mechanical data

Length	2,108 mm
Width	1,048 mm
Depth	40 mm
Weight	25.5 kg

## Temperature coefficient

$P_{max}$	-0.347 %/°C
$V_{oc}$	-0.263 %/°C
$I_{sc}$	0.057 %/°C

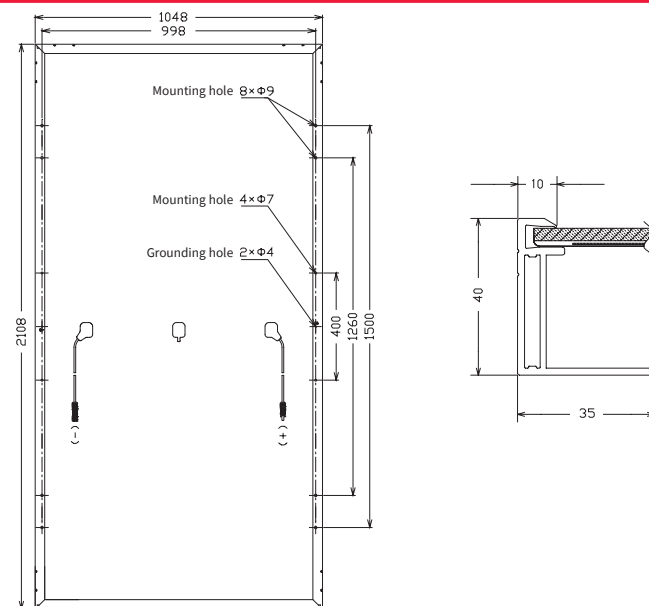
## Limit values

Maximum system voltage	1,500 V DC
Over-current protection	20 A
Temperature range	-40 to 85 °C
Max. mechanical load (snow/wind)	2,400 Pa
Tested snow load (IEC61215 test pass*)	5,400 Pa

## Packaging data

Modules per pallet	27 pcs
Pallet size (L x W x H)	2,16 m x 1,13 m x 1,24 m
Pallet weight	Approx. 736 kg

## Dimensions (mm)



\*Please refer to SHARP's installation manual for details.

## General data

Cells	Half-cut cell mono, 166 mm x 83 mm, 9BB, 2 strings of 72 cells in series
Front glass	Anti-reflective high transmissive low iron tempered glass, 3.2 mm
Frame	Anodized aluminium alloy, silver
Backsheet	White
Cable	Ø 4.0 mm <sup>2</sup> , length 1,670 mm [or on request (+) 365 mm, (-) 50 mm]
Connection box	IP68 rating, 3 bypass diodes
Connector	C1, IP68

Note: Technical data is subject to change without prior notice. Before using SHARP products, please request the latest data sheets from SHARP. SHARP accepts no responsibility for damage to devices which have been equipped with SHARP products on the basis of unverified information. The specifications may deviate slightly and are not guaranteed. Installation and operating instructions are to be found in the corresponding handbooks, or can be downloaded from [www.sharp.eu](http://www.sharp.eu). This module should not be directly connected to a load.