



## INVERTER

**150W**

**RPI530**

**12V**

**RPI536**

**RPI539**

**300W**

**Shuko** **12V**  
**24V**

## UK 3-Pin Mains Plug Version

Instruction Manual

Gebruiksaanwijzing

Mode d'Emploi

Gebrauchsanleitung



CAUTION: Risk of electric shock. Do not open  
LET OP: Niet openen. Gevaar voor elektrische schok  
ATTENTION : Risque d'électrocution. Ne pas ouvrir  
ACHTUNG: Stromschlaggefahr. Nicht Öffnen  
ADVARSEL: Må ikke åbnes. Risiko for elektrisk chok



Do not expose to rain / moisture  
Niet in vochtige ruimtes gebruiken  
Tenir à l'abri de la pluie et de l'humidité  
Vor Regen und Feuchtigkeit schützen  
Må ikke anvendes i våde/fugtige omgivelser

# GB

Thank you for purchasing this inverter. Read this manual carefully and keep it for future reference.

## Warnings

- Read the manual prior to using the unit.
- Keep the manual for future reference.
- Keep the packaging for safer transport in its original packaging
- Install the unit in such a way that sufficient cooling is ensured.
- The unit contains voltage carrying parts. DO NOT open the unit.
- When you unplug the unit from the mains always pull the plug, never the lead.
- Never plug or unplug the unit with wet hands.
- If the plug and/or mains lead are damaged, they need to be repaired by a qualified technician.
- If the unit is damaged to an extent that you can see internal parts, do not plug the unit into a mains outlet.
- Repairs have to be carried out by a qualified technician.
- Do not place the unit near heat sources.
- When the unit operates, NEVER touch the battery clamps, this may result in electric shock.
- Do not clean the unit with solvents or detergents. Only use a dry cloth for cleaning.
- Make sure that no small objects or liquids can enter the housing.

## General Features

This range of inverters from Quasar transforms a 12 VDC battery voltage into a 230 VAC mains voltage. Thus enabling you to use your domestic equipment everywhere you want to use it. It can be used on boats, caravans, campers, cars etc.

## Important!

Under full load, high current is flowing through the battery cables. Therefore it is recommended to use only the supplied cables and no extension cables in order to avoid unacceptable voltage losses. If necessary, use an extension cord in the 230V circuit to the connected unit. To comply with the legal standards, the inverter may only be used with the supplied low voltage cables. Do NOT extend them.

The connected battery must be in good condition and fully charged. After some time, it may be necessary to start the car or boat in order to recharge the battery. At that moment, the inverter must be switched OFF beforehand in order to avoid damage due to excessive battery voltage.

## **GENERAL SAFETY**

1. Always operate the inverter from the correct power source, 12V or 24V battery (As applicable).
2. When connecting the cables from the battery to the inverter observe the correct polarity, RED is positive (+) and BLACK is negative (-). REVERSING the polarity will damage the inverter and is not covered by the warranty.
3. Ensure the DC input connections are secure, because a loose contact can result in excessive voltage drop and can cause overheated wires and melted insulation.
4. Locate the inverter and power source (battery) away from any inflammables to avoid any possible fire or explosion. NOTE. It is normal to experience sparks when connecting the positive terminal of the inverter from the battery. This is due to the current flow charging the capacitors in the inverter.
5. Where applicable, always ground the inverter before operation to avoid possible shock.
6. Check that the power consumption of the appliance to be operated is compatible with the output capacity of the inverter. Thus, you can't power a 450W drill machine with a 300W inverter.
7. The battery must be of adequate capacity (ampere-hour) to run the inverter at the required power. The maximum current ratings for the various inverter models are:  
12V-300W = 33A  
The capacity of a battery is stated in Ah (Amps/hour) and is noted on the battery. This capacity is applicable over a period of 20 hours. Example: A battery with a capacity of 48 Ah can deliver a current of 2.4 Amps during 20 hours or a current of (a bit less than) 4.8 Ah during 10 hours. At a higher current, the capacity is always a bit lowered.
8. Insert an in-line fuse with the proper rating into the cable leading to the battery.
9. Disconnect the inverter when not in use.

## **INSTALLATION**

1. Install inverter in a cool, dry and well ventilated area away from any inflammable material.
2. Ensure the DC power cables are as short as possible (<2m) and of suitable size to handle the current required. This is to minimise any voltage drop when the inverter draws high currents. Remember solid, secure, clean connections are essential for optimum performance. It is better to use an extension lead in the 230V circuit than in the 12V circuit.
3. Ground the inverter whenever possible.

## **Operation**

Connect the inverter to the battery (red is positive, black is negative). Make sure that all connections are of good quality. Switch the inverter on first and the unit to be powered afterwards. Switch off in reverse order.

To operate units with a high start voltage, it might be necessary to switch the unit several times on and off. Wait a few seconds between every switching.

## **Protection**

All Quasar inverters are protected against thermal overload, peak currents and short circuit. This ensures the unit won't be damaged when something happens. The unit will switch off automatically to protect the internal parts.

To prevent switching off, always check if the cooling fan isn't obstructed, if there is sufficient airflow around the unit and if it's connected to the right DC input voltage.

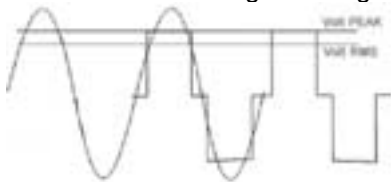
## **Fuse replacement**

ALWAYS disconnect this unit from its power supply before attempting to replace the fuse. Remove the old fuse from the holder and replace with a fuse with the exact same power rating. Replacement with anything other than the exact same fuse might cause damage to this unit.

## **FREQUENTLY ASKED QUESTIONS AND ANSWERS**

### *Measuring AC voltages:*

The output wave of the AC inverter is a MODIFIED SINEWAVE. If you choose to measure the AC output voltage, you must use an TRUE RMS VOLT METER. Using any other type of voltage measuring device will result in an AC voltage reading that's up to 20 to 30 volts lower than the rated value.



### *What battery do I need to run my inverter?*

Batteries only have a limited power storage capacity and must be regularly recharged. In a car or on a boat this is done when the engine is running. If you use a stand-alone battery, you must charge it with a separate battery charger. To determine the required battery capacity you can divide the power consumption of a unit by 10 for a 12 V inverter and by 20 for a 24V inverter. Example: You connect a portable TV with a power consumption of 50W. If you have a 12V inverter, the current consumption is 5Amps and for a 24V system 2.5Amps. Depending on the capacity of the connected battery, you can easily calculate when you have to recharge the battery. Never fully discharge your battery. It might be definitely damaged.

## **Specifications**

### ***Inverter 150W***

Input voltage RPI530: ..... 12 VDC (10 – 16 VDC)  
Output voltage: .....230 VAC  
Continuous power: ..... 150 W max.  
Peak power: ..... 300 W max.  
Efficiency: ..... 90 %  
AC Frequency: ..... 50 Hz ( $\pm 1$  %)  
Thermal protection: ..... 65 °C  
Fuse: .....25 A  
Dimensions (hwxwd): ..... 54 x 128 x 170 mm  
Weight: ..... 0,882 kg

### ***Inverter 300W***

Input voltage RPI536: ..... 12 VDC (10 – 16 VDC)  
Input voltage RPI539: ..... 24 VDC (20 – 30 VDC)  
Output voltage: .....230 VAC  
Continuous power: ..... 300 W max.  
Peak power: ..... 600 W max.  
Efficiency: ..... 90 %  
AC Frequency: ..... 50 Hz ( $\pm 1$  %)  
Thermal protection: ..... 65 °C  
Fuse: .....40 A  
Dimensions (hwxwd): ..... 54 x 128 x 194 mm  
Weight: ..... 0,914 kg

- Specifications and design are subject to change without prior notice.

*Do not attempt to make any repairs yourself. This would invalid your warranty. Do not make any changes to the unit. This would also invalid your warranty. The warranty is not applicable in case of accidents or damages caused by inappropriate use or disrespect of the warnings contained in this manual. Quasar Electronics cannot be held responsible for personal injuries caused by a disrespect of the safety recommendations and warnings. This is also applicable to all damages in whatever form.*