

24V SOLAR POWER KIT

Ref. 114376



FOR AVIDSEN SWING
AND SLIDING GATES



LITHIUM BATTERY
24 V - 6 AH



20 W



24 V



EASY
TO INSTALL



ENERGY
SAVINGS

A - SAFETY INSTRUCTIONS

1 - OPERATING PRECAUTIONS

- Read this entire manual before starting the installation.
- Do not allow children to handle the product.
- Be careful to check the connection polarity of each item before installation.
- Do not use the solar kit in conjunction with a power supply.
- Avidsen France cannot be held liable for any use that does not comply with the instructions in this manual and causes damage.

2 - WARNING

This product has been designed solely to power a gate motor drive or a wireless videophone. Any other use of the device is not covered by the warranty or technical support. Avidsen cannot be held liable for any use that does not comply with the instructions in this manual and causes damage. Children should be supervised to make sure that they do not play with the device. Do not modify or add components to the solar kit. When replacing the battery, use a battery of the same voltage and capacity.

3 - MAINTENANCE AND CLEANING

- The exterior of the solar panel must be cleaned regularly to maintain full efficacy. Use a slightly dampened cloth for cleaning.
- Do not use abrasive substances, substances containing alcohol, thinners or other flammable substances.
- Do not spray any products directly onto the unit.

4 - RECYCLING

This solar power kit is made of different types of materials, some of which must be recycled and others which must be discarded. None of the items should be left outdoors or thrown into a household bin. To separate the different materials, the kit elements must be dissembled by a qualified person.

Sort items by type:

- Battery
- Plastics
- Scrap metal
- Cardboard and paper
- Others

Once the items have been sorted, send them to the appropriate recycling organisation and drop off the other materials at a waste treatment centre.

Information on environmental protection



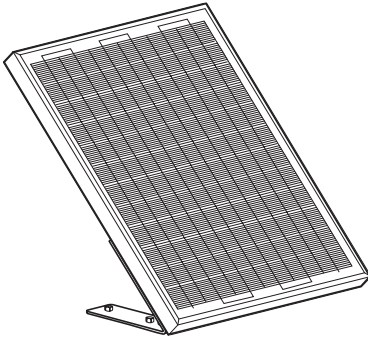
The consumer is required by law to recycle all used batteries and accumulators. Disposing of them in household waste is strictly forbidden.

Batteries/accumulators containing harmful substances are marked with symbols (shown opposite) which indicate that it is forbidden to discard them in the household waste. The corresponding heavy metal designations are as follows: Cd = cadmium, Hg = mercury, Pb = lead. These used batteries/accumulators can be disposed of at local waste treatment centres (centres for sorting recyclable materials), which are required to accept them. Keep batteries, button cells and accumulators out of reach of children. Store them in a safe place that is not accessible to children. They could be swallowed by children or pets. Risk of death! In the event that a battery is swallowed, immediately contact a doctor or go to A&E! Never short-circuit the batteries, and do not burn them as they may explode!

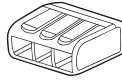


1 - KIT CONTENTS

1 x 1



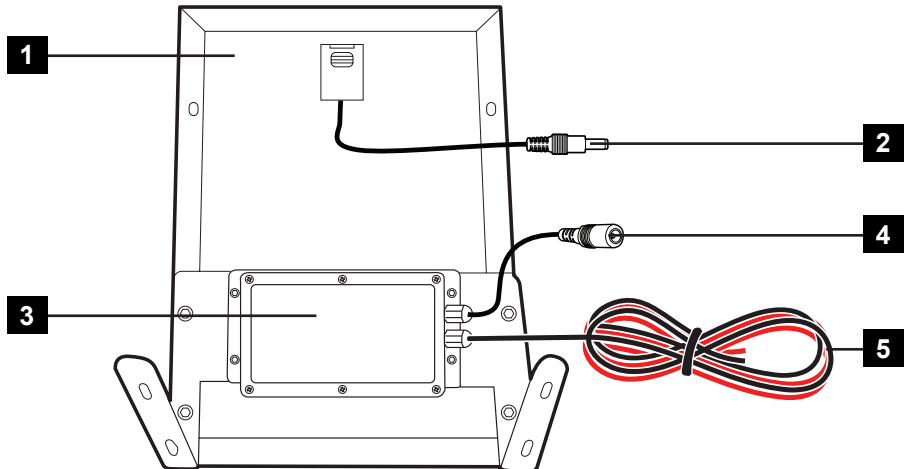
2 x 2



1 Solar panel

2 Wago connectors

2 - DESCRIPTION



- | | |
|---|---------------------------|
| 1 | Solar panel |
| 2 | Panel / battery connector |
| 3 | Battery box |
| 4 | Battery/panel connector |
| 5 | Battery connection cable |

C - INSTALLATION

Use fasteners that are suitable for your type of post.
(the fasteners included in the kit are to be used when installing on solid materials only)

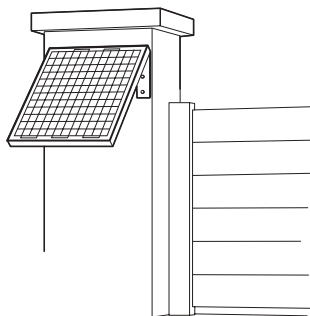


SOUTH-FACING MANDATORY:

The panel should never be in the shade.



INSTALLATION

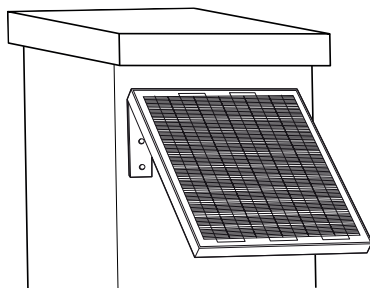
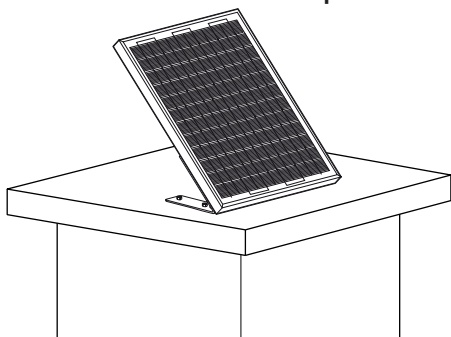


A solar kit depends on the sun to produce energy. In the absence of direct sunlight (shadow or cloud layer) on the panel, it will not recharge the battery.

If there is no sun for an extended period of time, the battery may discharge more quickly.

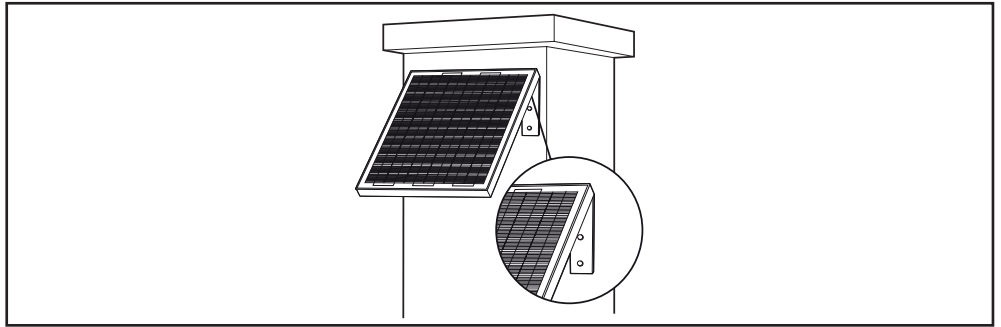
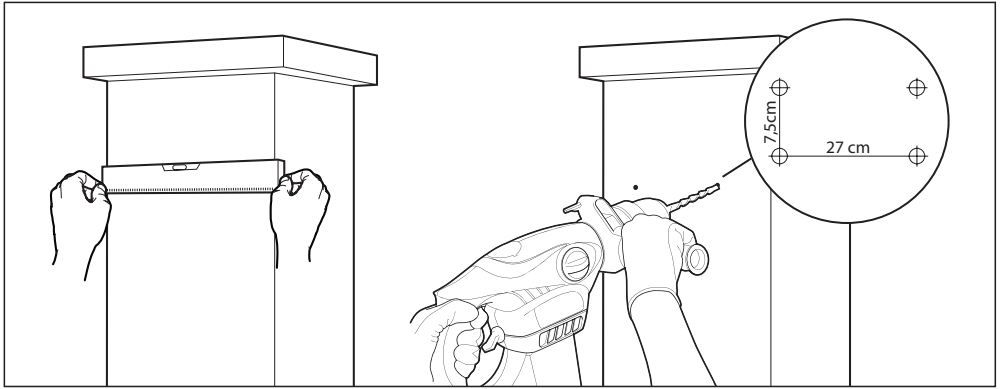
Make sure you are in a sunny enough environment to maintain proper battery charge.

2 possible installation methods

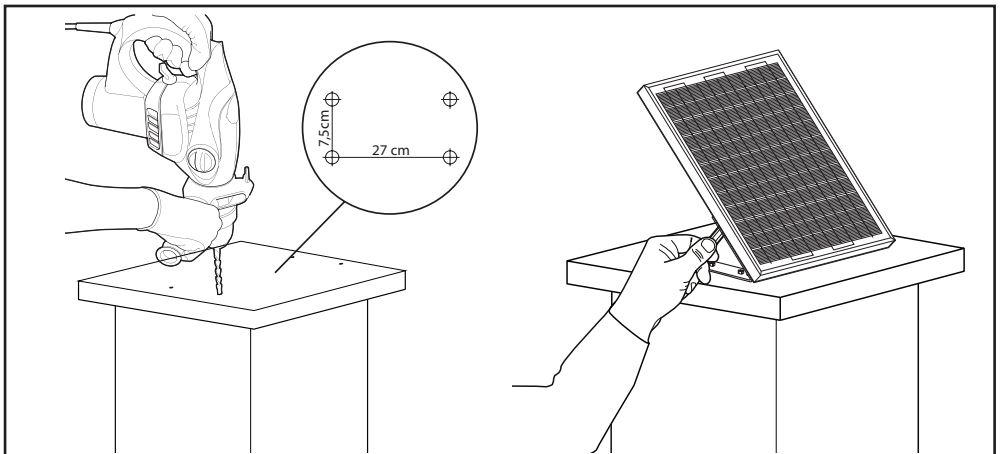


The solar panel can be installed on both a horizontal surface and a vertical wall.

1 - INSTALLATION ON A VERTICAL SURFACE



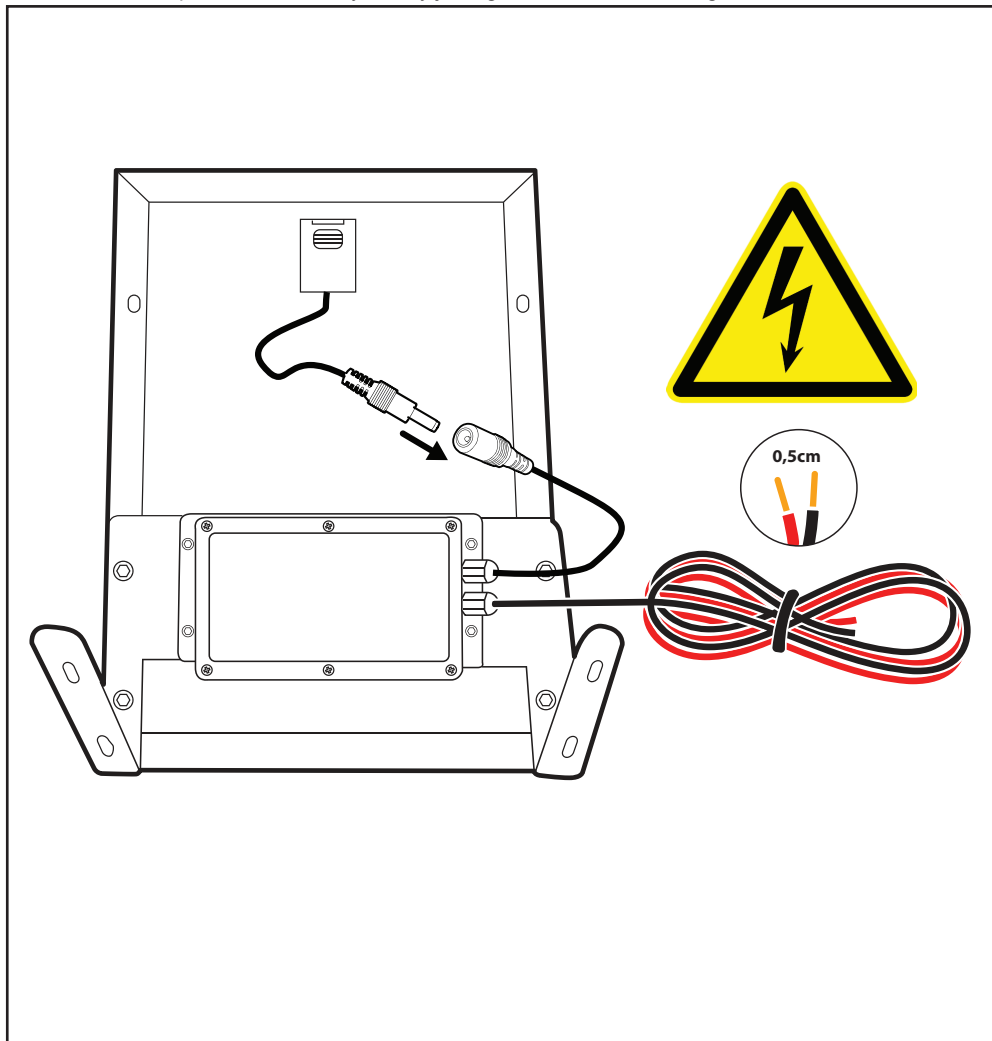
INSTALLATION ON A HORIZONTAL SURFACE



D - GENERAL CONNECTION

CONNECTING THE WIRES TO THE SOLAR PANEL

Connect the solar panel to the battery box by joining the two connectors together.



The battery cables are factory-protected by heat-shrink tubing. Remove cable insulation, then strip the wires by 0.5 cm.

PLEASE NOTE: Once the cables are stripped, there is a risk of short circuit. Set the cables aside while awaiting permanent connection to the board.

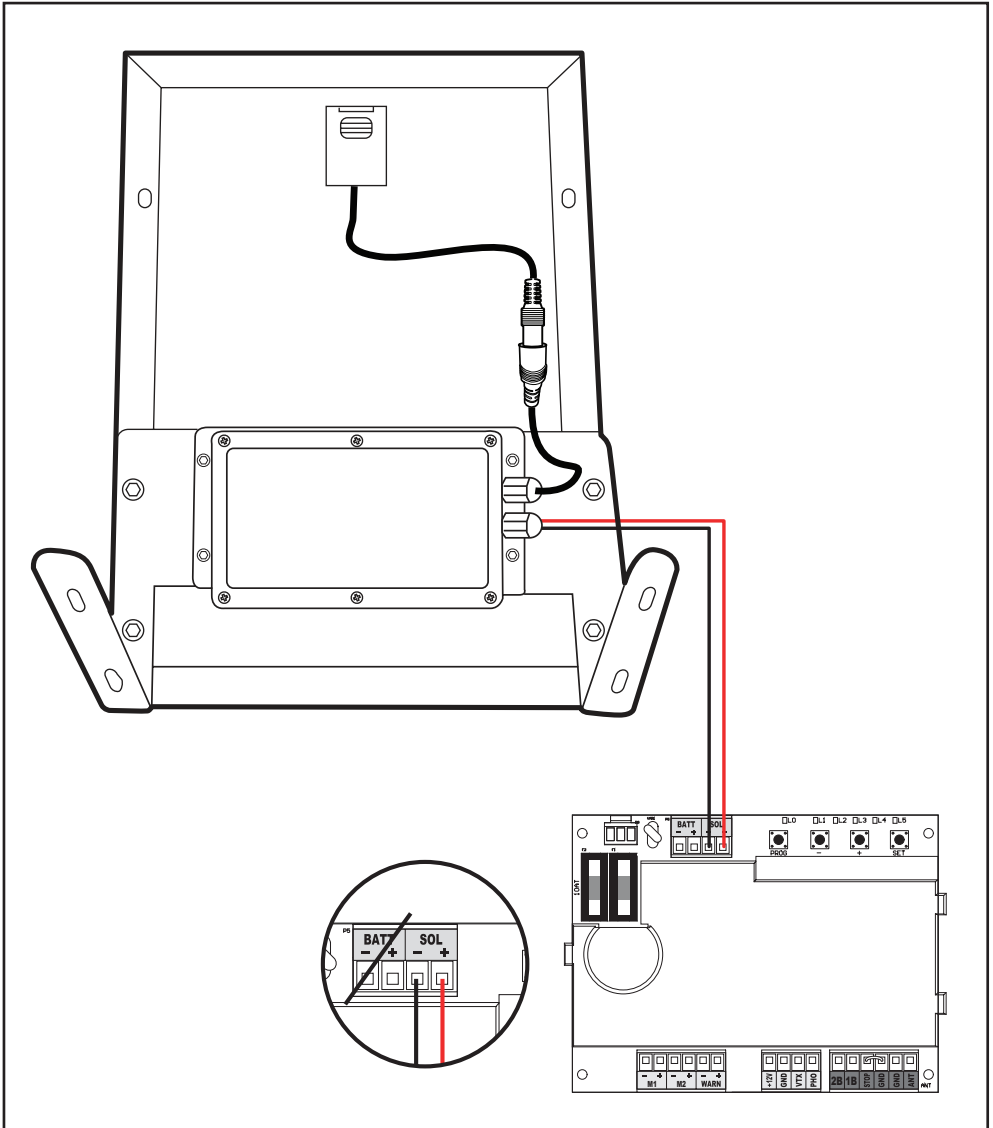
D - GENERAL CONNECTION

For sliding gate motor drives (CA2B9SL24V board).

Connect the red wire of the battery box to GROUND + on the board.

Connect the black wire of the battery box to GROUND – on the board.

PLEASE NOTE: Do not connect anything to BAT+/BAT- on the board



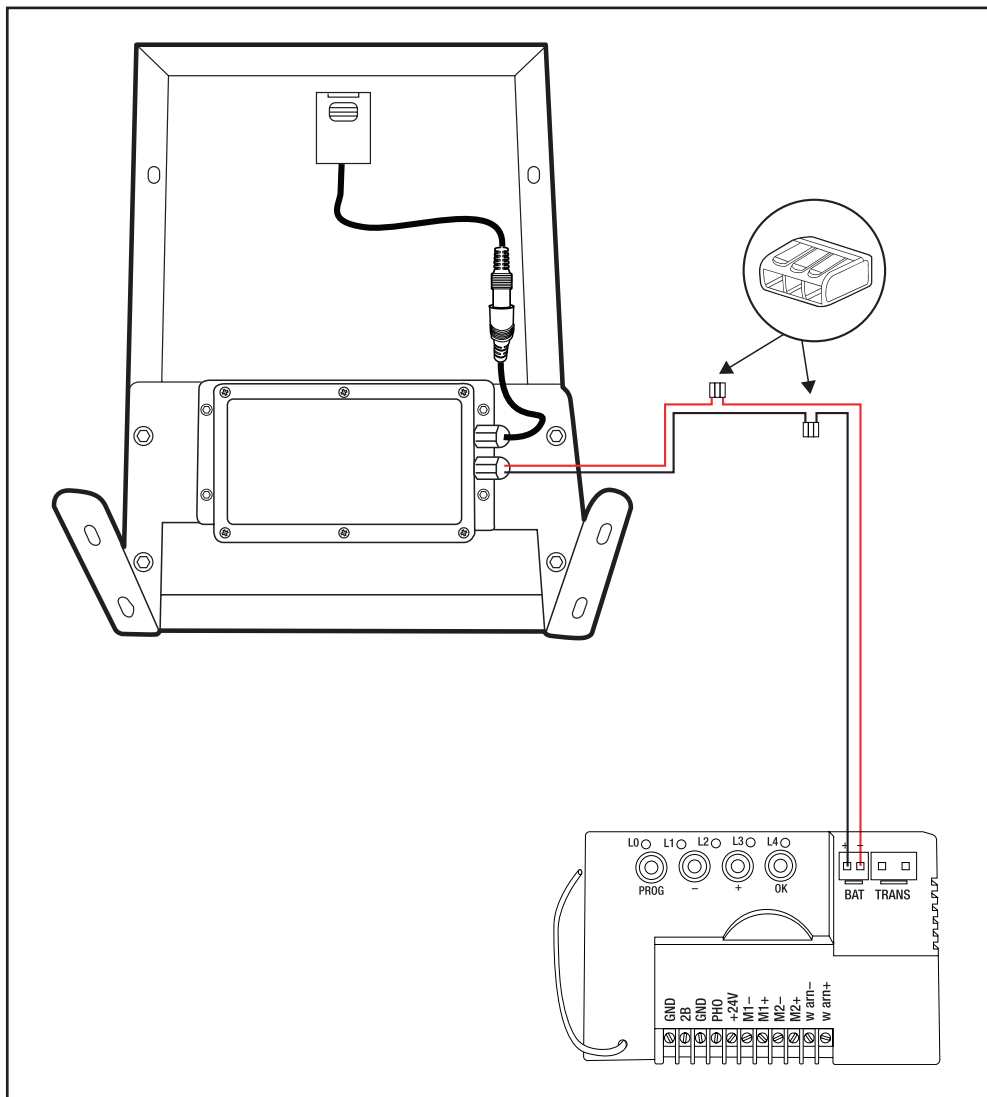
You are not allowed to shorten or extend the battery cable to connect the panel to the board.

D - GENERAL CONNECTION

For AVLO boards (swing gates) only

Use the wagoes supplied to connect the battery/circuit board cables to the white connector. Remember: The white connector does not come with the solar kit but with the motor drive.

PLEASE NOTE: Observe the polarity when connecting



This solar power kit is only intended to power Avidsen, Extel and Thomson motorised gates. Automatic openers must operate exclusively on 24VDC voltage. This solar kit cannot be used with any other voltage.

PAY ATTENTION TO THE CONNECTION POLARITY.

Please refer to this manual at all times for wiring the solar kit.

A solar kit depends on the sun to generate power. In the absence of direct sunlight (shadow or cloud layer) on the panel, it will not recharge the battery. If there is no sun for an extended period of time, the battery may discharge more quickly.

Make sure you are in a sunny enough environment to maintain proper battery charge.

Do not open the battery box.

Keep the battery box on the back of the solar panel.

Do not charge the battery with an independent charger.

Do not lengthen or cut the cables between the solar kit and the circuit board of the motor drive.

Charge control is managed by the battery. In case of low voltage, the charge controller will automatically cut off the battery output (no voltage) to protect the battery from deep discharge.

Allow the battery to recharge to see if voltage reappears on the battery output.

Symptoms	Possible causes	Solutions
The circuit board does not start	Battery discharged. Faulty connection	Disconnect the solar kit from the motorised gate and allow the solar panel to charge the battery for at least 48 hours. Check that the connector is making good contact. Check polarity.
The circuit board reboots when movement is attempted or an L1L2 or L1L3 error code is displayed (on a CA2B9 board)	Battery discharged	Disconnect the solar kit from the motorised gate and allow the solar panel to charge the battery for at least 48 hours
Battery lasts less than 10 opening/closing cycles	Solar panel is charging battery incorrectly due to its orientation. Electric overconsumption.	Reposition the solar panel due south and make sure the solar panel delivers voltage when facing the sun. Clean the solar panel. Don't use the board to power external devices other than those accessories designed to work with the motor drive. Make sure the motor's power consumption isn't too high.
Batteries discharge in 1 week	Excess consumption	Make sure only the motor drive is powered by the solar kit. Do not use the 230 V connector connected to the transformer to join the battery box to the circuit board.

1 - TECHNICAL FEATURES

1 Lithium battery	24 V voltage 6200 mAh capacity
Solar panel	Power: 20 W Max Power voltage (Vmp): 36 V Max Power current (Imp): 0.56 A
Solar panel dimensions	400 × 300 × 25 mm
Maximum output current	10 A
Operating temperature	-20°C to +60°C

2 - WARRANTY

This product is guaranteed for parts and labour for 2 years from the date of purchase. Proof of purchase must be retained for the duration of the warranty period. The battery comes with a 1-year warranty. The warranty does not cover damage caused by impacts or accidents. Be careful not to scratch the solar panel surface when installing it or it will not effectively charge the battery. This solar kit is designed to power a solar compatible automatic gate opening mechanism or a solar compatible wireless video intercom system. Any other use will not be covered by any warranty.

3 - HELP AND ADVICE

- If, despite the care we have taken in designing our products and drafting these instructions, you encounter difficulties when installing your product or you have any questions, we strongly recommend that you contact one of our specialists who will be glad to help.
- If you encounter operating problems during installation or a few days afterwards, it is essential for you to be in front of your installation when contacting us, so that one of our technicians can diagnose the source of the problem, as it will probably be the result of a setting that is incorrect or an installation that is not to specification.

Need advice for the installation or start-up of your product?
Contact our customer service technicians on:

0 892 701 369 Service 0,35 € / min
+ prix appel

Monday to Friday, 9am to 12pm, and 2pm to 6pm.

Avidsen undertakes to keep a stock of spare parts for this product throughout the contractual warranty period.

4 - EU DECLARATION OF CONFORMITY

Avidsen declares, under its sole responsibility, that the equipment with reference number 114376 complies with the applicable Union harmonisation legislation and its conformity has been assessed pursuant to the applicable standards in force:

Directive EMC 2014/30/EU

- EN61000-6-3:2021
- EN61000-6-1:2019

The above-mentioned products comply with the RoHS 2011/65/EU Directive and delegated directive 2015/863.

Signed by Alexandre Chaverot, CEO, on behalf of Avidsen
19 avenue Marcel Dassault, 37200 Tours, France

Tours, 11/02/2026

Alexandre Chaverot, CEO





avidsen

Avidsen
19 avenue Marcel Dassault - ZAC des Deux Lions
37200 Tours - France
www.avidsen.com