

CITYPAK5

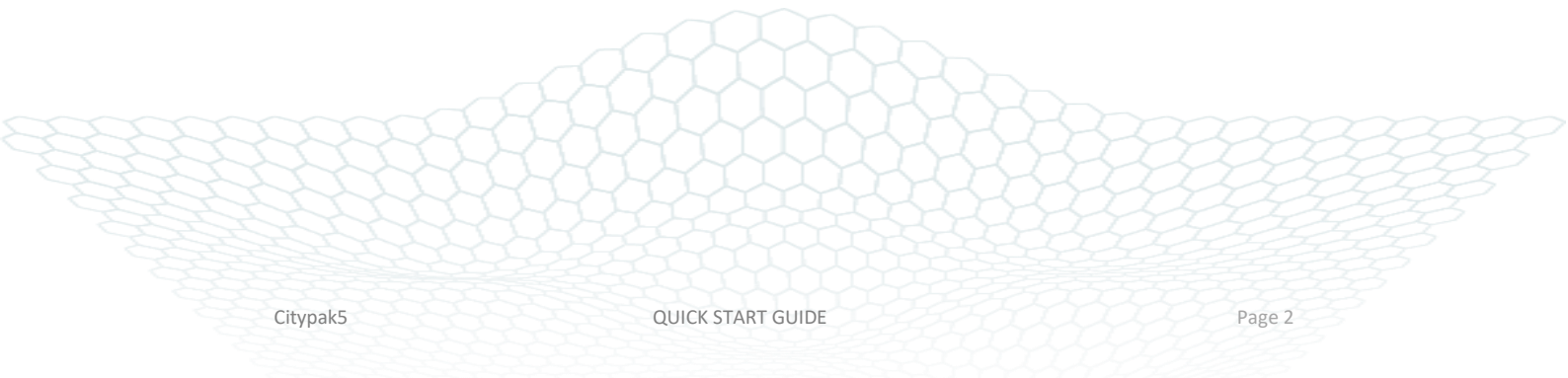
QUICK START GUIDE

v 1.0.5 EN



REVISIONS

Date	Name	Modifications	Version
12/FEB/2024	YME	First release	1.0.0 (FR)
19/JUN/2024	AGO	English translation	1.0.0
18/AUG/2024	AGO	Changes on chapter 3 (network cable).	1.0.1
05/DEC/2024	AGO	Added Wiegand cable recommendations	1.0.2
05/FEB/2025	AGO	Information about direct Wiegand cable length limitation	1.0.3
17/JUIN/2025	KMA	Added information about the 4G interface	1.0.4
09/SEP/2025	AGO	New Chapter 8, "MAINTENANCE TIPS." Added comment on chapter 3 on how to correctly tighten the Ethernet connector. Maximum distance of the direct Wiegand output modified.	1.0.5



1. WHAT IS DELIVERED



Citypak5 LPR unit with the sun shield mounted.

Power: 24 VDC

Consumption: 28W Max

PoE: Optional

4G: Optional

Protection rating: IP67



The **RJ45 protective cover**, to ensure the protection of the network connector.



One of these **compatible cables** (please note the different lengths):

1. Power only (3, 10 or 30 m)
2. Power + digital I/O (15 m)
3. Power + RS-485 / Wiegand (15 m)



The use of a **power connector cap** is mandatory when using PoE.



4G option includes an antenna and a slot for a nano SIM card on the rear panel. Available in three regional versions.



AC/DC power supply approved by SURVISION



Mounting system: wall bracket + cradle.



Pole adapter

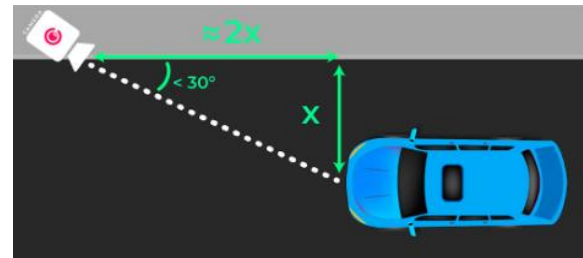
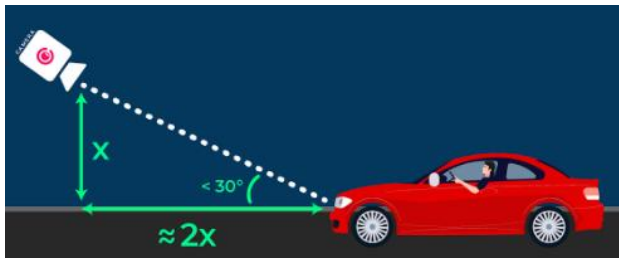
2. CAMERA POSITIONING

The best placement for the LPR unit depends on many factors. In case of any doubts, do not hesitate to contact our Support team to help you decide. However, here are some of the basic steps and rules.

- **DECIDE IN WHICH ZONE THE LICENSE PLATE SHOULD BE READ.**
- **CHECK THAT THE DISTANCE BETWEEN THE VPK5 AND THE PLATE IS WITHIN THE RANGE GIVEN BELOW:**

	European (long) plates	American (short) plates
Recognition distance	From 7 to 35 m	From 7 to 28 m
Coverage width	Up to 7 m	Up to 7 m

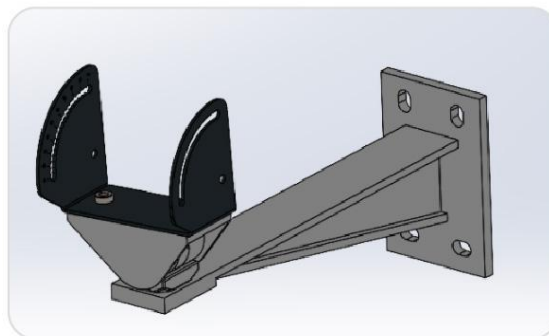
- **MAKE SURE THE 30 DEGREE ANGLE LIMITS ARE RESPECTED (BOTH VERTICAL & HORIZONTAL).**



- ONCE THE INSTALLATION SPOT IS DECIDED BASED ON THE PREVIOUS STEPS, **ATTACH THE BRACKETS USING APPROPRIATE EQUIPMENT (BOLTS, CLAMPS, etc.).**

3. LPR UNIT INSTALLATION AND WIRING

- **MOUNT THE LPR UNIT ON THE WALL OR ROOF USING THE SWIVEL PIECE** WHILE KEEPING THE BOLTS SLIGHTLY UNSCREWED TO ALLOW ADJUSTMENTS.



- **CONNECT THE CABLE PROVIDED** (UNLESS YOU ARE EXCLUSIVELY WIRING WITH PoE). HERE ARE THE PINOUTS FOR THE DIFFERENT CABLE OPTIONS:

POWER ONLY	
BROWN	24 VDC
BLUE	GROUND

POWER + RS485	
BROWN	24 VDC
GREY	GROUND
GREEN	RS-485 A // Wiegand D0
WHITE	RS-485 B // Wiegand D1
YELLOW	RS GND

POWER + RELAY	
BROWN	24 VDC
WHITE	GROUND
GREEN	RELAY OUT A
YELLOW	RELAY OUT B

WARNING! Despite our efforts, colors may differ from the above. However, all cables come with an attached sticker with the pinouts.



- **IF YOU ARE USING RS485 / Wiegand CABLE**

WARNING! Do not connect the RS485 / Wiegand output to 24 VDC or any other power supply. However, you must connect the GND of the 24 VDC power supply to the output of the RS485 module.

NOTE FOR WIEGAND PROTOCOL USERS: Citypak5 provides an integrated Wiegand output. However, this direct output is limited to 20 m. If you have a longer distance between the LPR unit and your access control system, please set the output mode to RS-485 and the electronic conversion board ref. S103029.

- **CONNECT A NETWORK CABLE** (NOT PROVIDED), USING THE RJ45 PROTECTIVE COVER (INCLUDED).

SURVISION's minimum requirements, to ensure proper operation, are as follows:

- Minimum **Cat 5e FTP** round cable with a diameter of **between 5 mm and 6.5 mm** to ensure that the protective cover is securely adjusted.
- Network cable design compatible with the protective cover with no elements that prevent correct and reliable assembly: no protective latch or cap, no locking pin, no sleeve, not angled (see the images below).

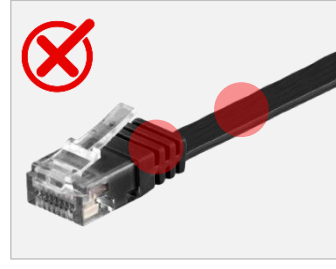
Beyond these requirements, choose the cable reference according to availability in your region while considering the specific environmental conditions of your installation, as for example: high/low temperature resistance, UV resistance or non-flammable, etc.



Example of a compatible reference (with or without PoE)



Plastic shielding is not compatible with PoE



Flat cable



No compatible with latch protection



WARNING!

The protective cover is essential to protect the network cable from water filtration.

The tightening torque must be between 0.8 and 1,5 N·m.



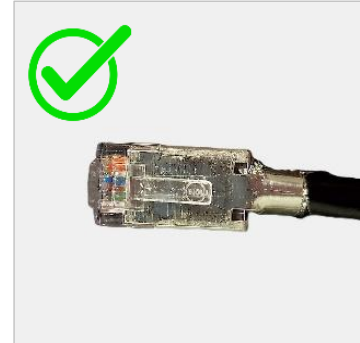
WARNING!

During installation, ensure that the rubber insert forms a continuous ring around the cable. This guarantees proper compression and a watertight seal in line with specifications.



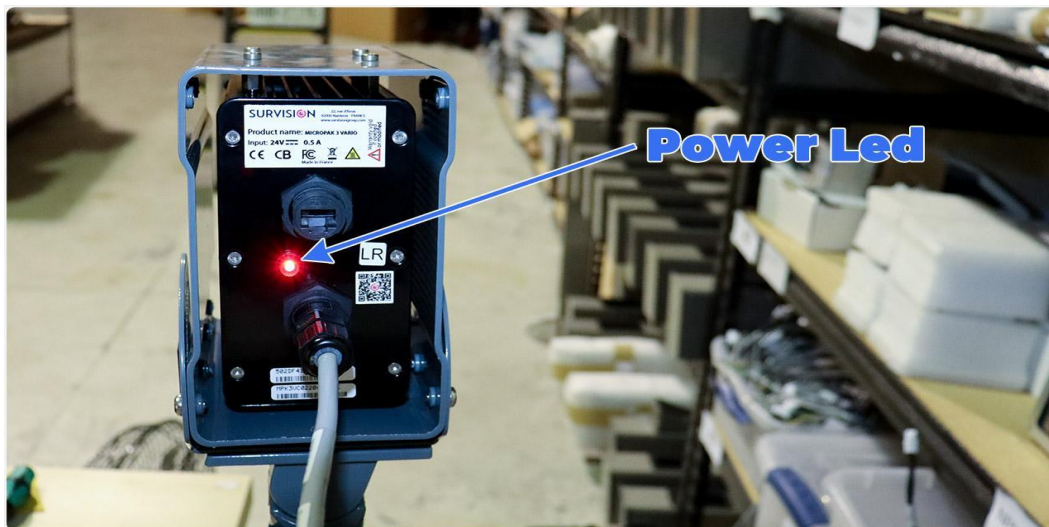
NOTE: The Citypak5 references provided with PoE capability comply with the standard IEEE 802.3at. Use only a grounded Ethernet cable (Cat6 with a shielded RJ45 connector).

NOTE: Citypak5 with PoE option can be connected to both PoE and 24VDC at the same time. If one type of power supply is cut off, the other takes over automatically.



NOTE: wiring the network cable is highly recommended even for those users whose operation relies on serial protocols (serial, Wiegand or OSDP). An Ethernet connection will grant the possibility of troubleshooting properly in case of problems.

4. POWER ON



Citypak5 has a status LED on its rear face. When the LPR unit is powered on, the normal cycle of this red LED should be as follows:

- **LED ON** for less than 30 seconds.
- Then, **LED OFF** blinking regularly (every 5 seconds approx.)

In the event of a problem, the light can follow one of these patterns.

Case 1: The LED never turns on when powering the unit. Please check the connection and power source.

Case 2: The LED remains on. Please contact support to check if the camera can be repaired.

Case 3:

- LED ON for less than 30 seconds,
- Then LED OFF, blinking regularly (every 5 seconds approx.),
- Then LED ON for less than 30 seconds,
- Then LED OFF, blinking regularly (every 5 seconds approx.),
- Pattern being repeated in a loop.

Please contact support to check if the camera can be repaired.

5. CONFIGURATION

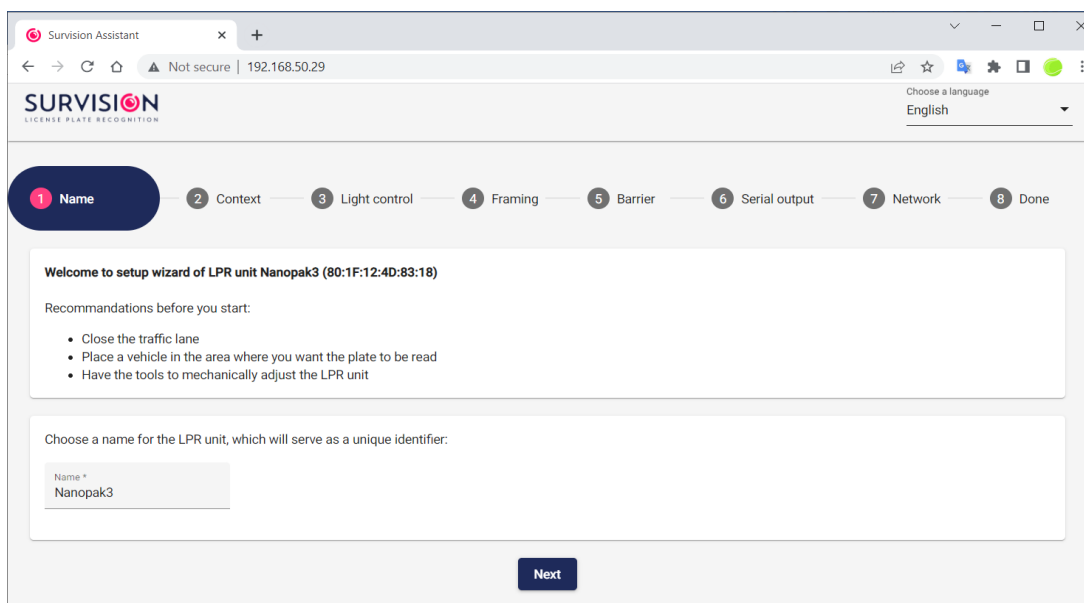
SURVISION offers 2 options for setting up your LPR unit:

1. Web Configuration Assistant

A web configuration wizard is available on LPR units with firmware version 2.4.0.0 and above. It will allow you to modify these basic LPR unit parameters:

- LPR unit name
- Recognition context (geographical area)
- Light control (choose the best settings based on the type of lane)
- Framing (guided setting of camera aim, zoom and focus)
- Barrier (activate the digital output, if needed)
- Serial output (activate the RS-485 output, if needed)
- Network (IP address).

To reach the assistant, **type the IP address of the LPR unit on any web browser** (your computer's network configuration must be able to access the camera's IP range).



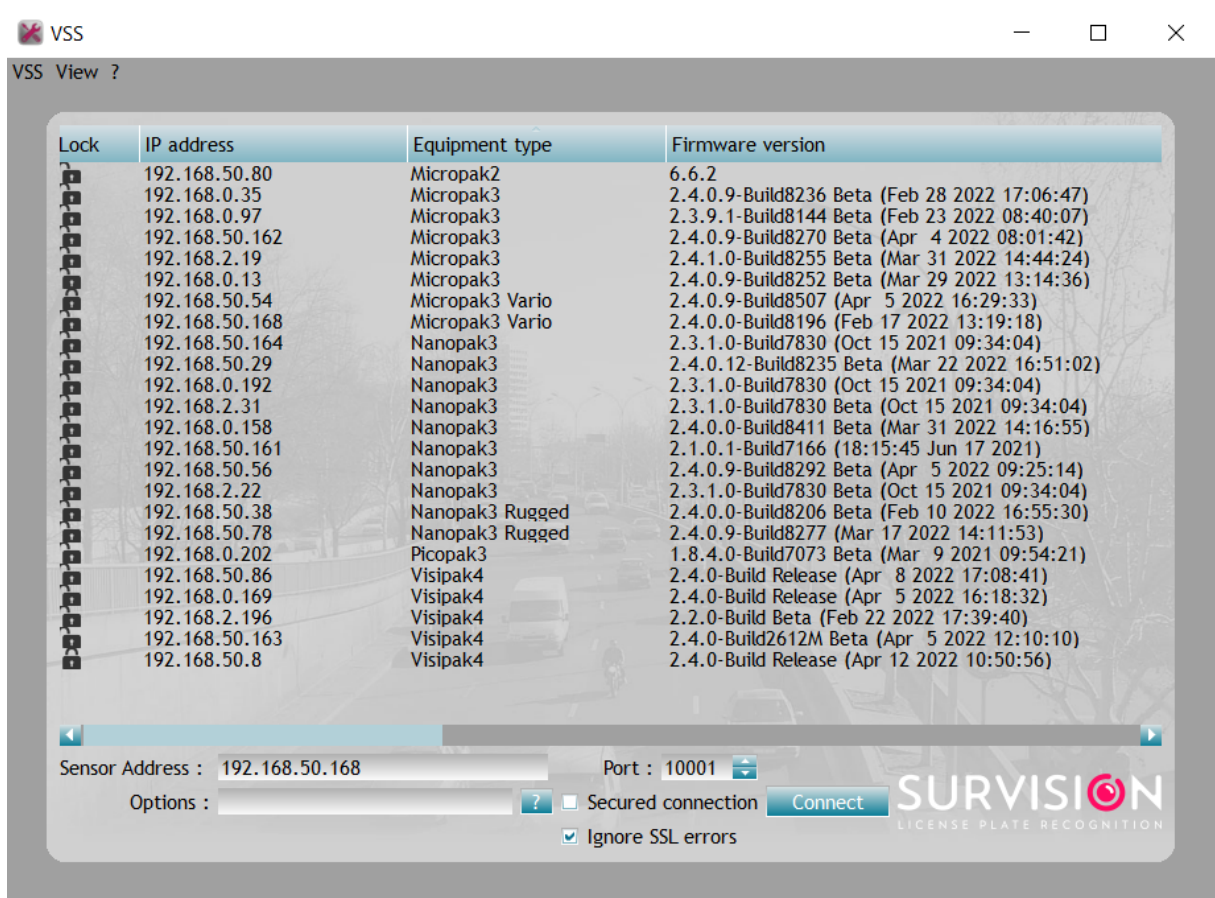
NOTE: Survision's LPR units have an IP address by default, which is printed in the test sheet provided. This IP address is always 192.168.0.XYZ, where XYZ is the conversion (from hexadecimal to decimal) of the two last characters of the MAC address.

2. VSS

VSS is a complete software tool that enables users to:

- Modify all the parameters of an LPR unit (network, OCR, communications).
- Receive video stream and information detected by the LPR unit.
- Record the video stream, including detections and configuration of the LPR units.
- Test some features of the LPR units.

For more information, download VSS and its manual from [My Survision](#).



6. RECALIBRATE OPTICS

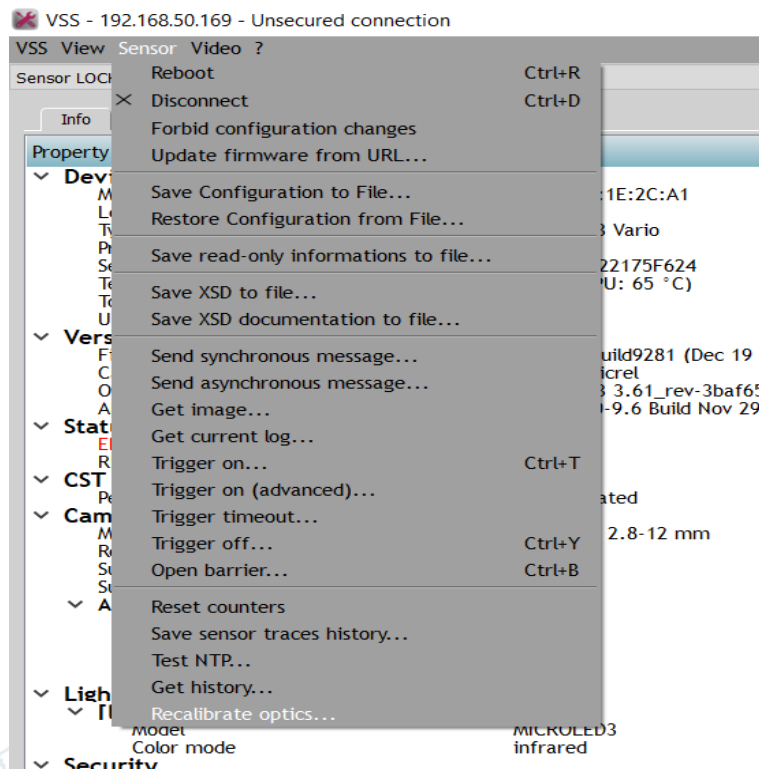
Citypak5 LPR units are equipped with a motorized lens.

Occasionally, the optical position may be altered due to vibrations during transport and, as a result, the zoom and focus levels displayed on the configuration tools may not be real. This effect has the following consequences:

- The minimum/maximum zoom levels that you can set are not the actual minimum/maximum that the lens can achieve.
- For certain levels of zoom it becomes very difficult to set a focus level that gives a sharp image.

To solve this and other malfunctioning of the motorized lenses:

- Make sure that the LPR unit has a firmware version 2.6.0.1 or above.
- Using VSS (v7.6.2 or higher), run the "Recalibrate optics" command, found in the "Sensor" drop-down menu. See image below. This action automatically resets the zoom to minimum, ensuring that the optics have the correct reference values.



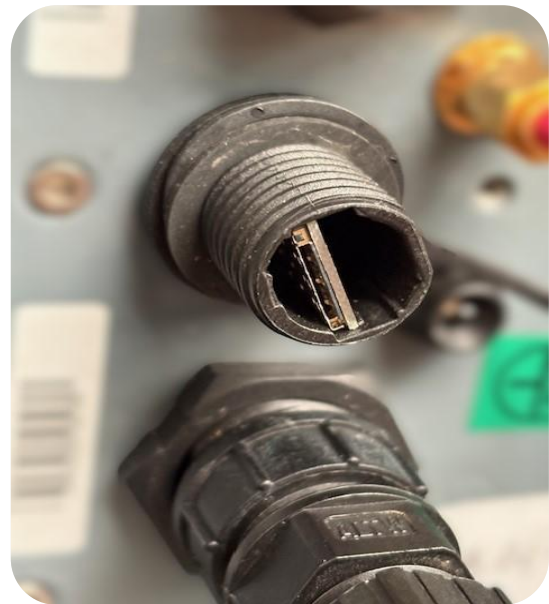
7. THE 4G INTERFACE

Citypak5 is the only LPR unit of Survision's portfolio that can be ordered with the onboard 4G option. When this option is selected, the device also includes:

4G antenna: integrated



1 card socket located on the rear

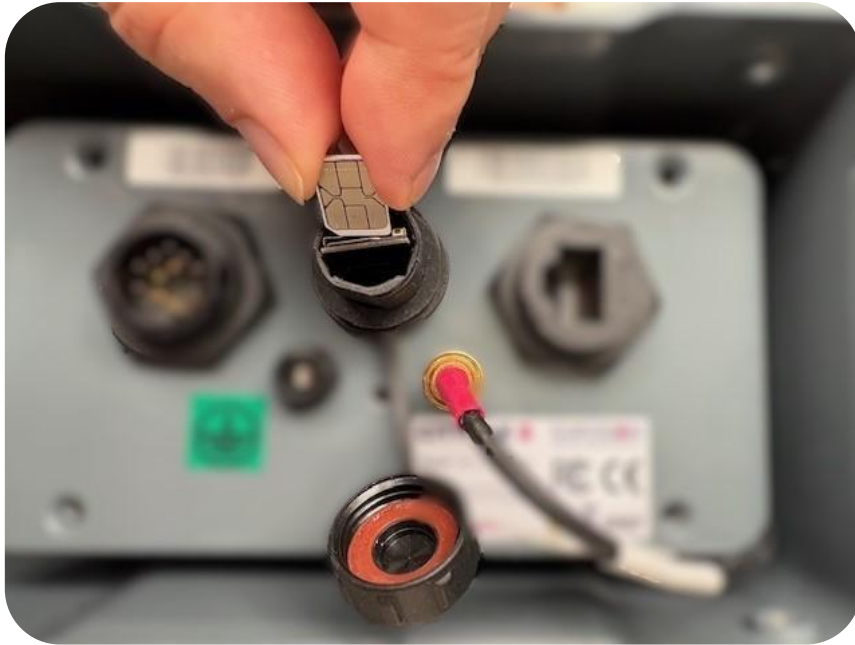


NOTE FOR USERS:

- Make sure that the purchased reference includes the 4G modem compatible with your region.
- Keep in mind that the socket is ready for NANO Sim size.
- Be aware that the basic purpose of the 4G feature is to help those clients who, after having done the configuration using the wired network, just need the LPR unit to push messages to a URL.
- Survision does not provide any environment (SIM or private network) to allow its clients to have bidirectional communication with the LPR units that rely exclusively on 4G communication.

SIM Card Insertion

When inserting the Nano-SIM card into the slot, make sure the card's beveled corner is pointing downwards:



Network Connectivity Information

Once a SIM card with a valid data plan has been inserted into the SIM slot and the LPR unit has been powered on, you can check the connection status and other relevant information in the VSS interface under the “Modem” section. Please refer to the VSS manual for more details.

8. MAINTENANCE TIPS

Once correctly installed, Survision's LPR units require no maintenance other than cleaning their front panel (infrared filter or other). This is explained in the following section.

It is also important to check for anything that could alter the field of view and obstruct the view of the license plate. Here are a few examples: spider webs in front of the camera, vegetation growing and blocking the view of vehicles, billboards installed near the camera, etc.

Cleaning

What to use?

Synthetic microfiber wipes with no added chemicals. A mixture of isopropyl alcohol and water (*) as described below. Clean, dry hands (we recommend using powder-free, disposable silicone or vinyl gloves).

How to use it?

Rinse the surface thoroughly. Lightly dampen the wipe. Clean the surface by wiping from the center towards the edges. Use a dry wipe immediately after wet cleaning. Repeat wet and dry wiping if cleaning has not removed contaminants.

(*) Mixtures of IPA (isopropanol) and distilled water in ratios between 30/70% and 70/30%. Do not use cleaning products containing solvents, alcohol, or acetone.

9. RMA AND RETURN TIPS

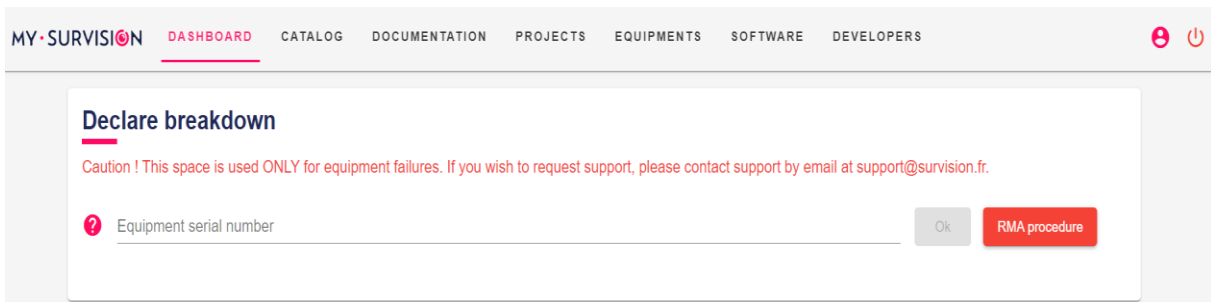
Before declaring an RMA, please make sure that you have checked and discarded all the external factors (typically power or network issues).

Also make sure that your problem is not related to a known bug that may have been solved in a firmware version more recent than the one running in your LPR unit.

Do not hesitate to confirm the failure with our Technical Support team in case of doubts.

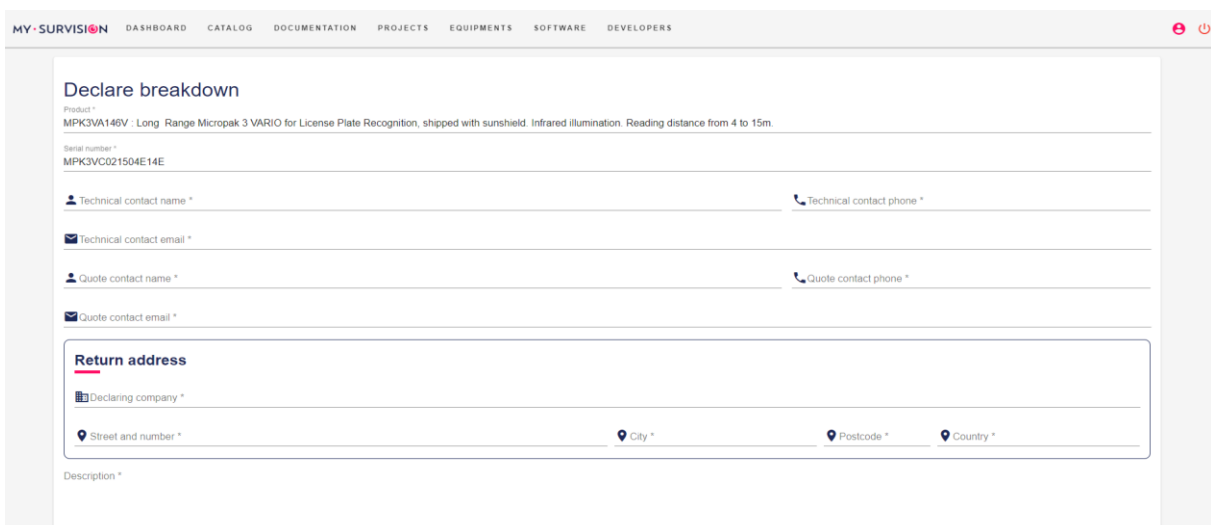
If sending the LPR unit to repair is necessary, those are the steps to follow:

- Connect to [MySurvision](#) and type the serial number of the faulty unit in the dedicated box that you will find on the Dashboard tab.



The screenshot shows the MySurvision dashboard with the 'DASHBOARD' tab selected. The main content area is titled 'Declare breakdown'. Below the title is a caution message: 'Caution ! This space is used ONLY for equipment failures. If you wish to request support, please contact support by email at support@survision.fr.' There is a text input field labeled 'Equipment serial number' with a red question mark icon to its left. To the right of the input field are two buttons: a grey 'Ok' button and a red 'RMA procedure' button.

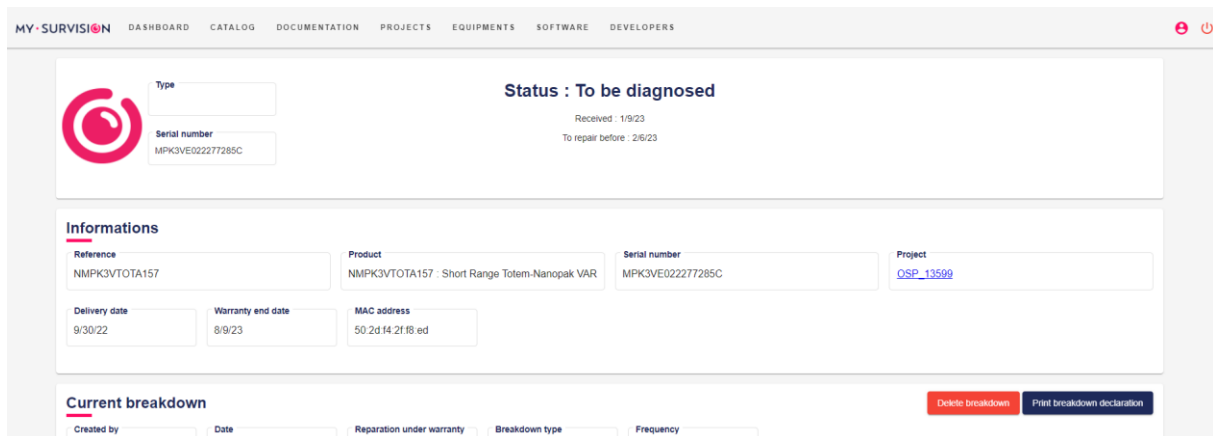
- Fill the declaration sheet that will appear next and click on “Declare breakdown” once you have completed all the fields.



The screenshot shows the 'Declare breakdown' form in detail. The form is titled 'Declare breakdown' and contains the following fields:

- Product *
MPK3VA146V - Long Range Micropak 3 VARIO for License Plate Recognition, shipped with sunshield. Infrared illumination. Reading distance from 4 to 15m.
- Serial number *
MPK3VC021504E14E
- Technical contact name * (with a person icon)
- Technical contact phone * (with a phone icon)
- Technical contact email * (with an envelope icon)
- Quote contact name * (with a person icon)
- Quote contact phone * (with a phone icon)
- Quote contact email * (with an envelope icon)
- Return address**
 - Declaring company * (with a building icon)
 - Street and number * (with a location pin icon)
 - City * (with a location pin icon)
 - Postcode * (with a location pin icon)
 - Country * (with a location pin icon)
- Description *

- Once done, this LPR unit will appear on the list “Dysfunctional equipment” at the bottom of the same Dashboard tab.
- By clicking on a specific LPR unit a dedicated page will open, where you will be able to confirm its shipping (optional) or cancel the breakdown declaration. In addition, the entire history can be tracked at the bottom of this page.



- All the status changes that will follow are under SURVISION’s control and you will always be informed via e-mail as well.
- To return the Citypak5, only use appropriate packaging, suitable for the transport of optoelectronic equipment. On request, SURVISION can provide specific packaging designed to guarantee the protection of sensors during transport.

10. TECHNICAL SUPPORT

In case you have any questions or if you need access to our client portal to download some of our software tools, please open a support ticket by sending an e-mail to one of the addresses below. Our team will reach out to you in less than 24 hours.

support@survision.fr support@survisiongroup.com

11. RELATED DOCUMENTS

Here is a list of related documents that you can find on [MySurvision](#) :

- Citypak5 datasheet
- Citypak5 3D STEP file
- Citypak5 : certifications CE, IP, ROHS et UKCA
- Wall bracket datasheet
- Wall bracket 3D STEP file
- Pole adapter datasheet
- VSS Manual
- PVT Quick Start Guide (recording and scoring tools)

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