

RM Series IP Cameras

WiFi IP Cameras



Installation manual

How to connect the camera How to make the connection in the network



Contents of this handbook

The range of RM series cameras is a range of IP cameras for network connection including the wireless transmission.

This manual explains how to connect the camera, how to make the basic adjustments and how to configure the parameters for the network connection.



Introduction

The RM series includes WiFi cameras that can be connected without wires. Although predisposed for the wireless connection, these cameras are also equipped with RJ45 port for connecting to a wired LAN.

The power supply is possible with 12VDC adapters (not supplied). As expected the wifi connection is not supported Power over Ethernet (POE) supported by our IP cameras rows.

The RM Series cameras (except the RM-KIT kit) fully support the ONVIF international protocol and are compatible with any IP recording software or network video recorder (NVR) multi-protocol capable of handling this standard.



Technical data

See updated at tables: http://www.dseitalia.it/dati_telecamere_ip.htm



Installation

CONNECTIONS

The RM series cameras are equipped with a mains socket, a power plug 12VDC and a reset button.



- NETWORK PORT RJ45 - RJ45 FEMALE connector to connect the LAN. To connect to a hub or network switch using a standard LAN cable. To directly connect a single PC using a crossover cable (crossover).
- 12VDC - plug that connect the power supply 220VAC / 12VDC (not included). Connect a 12VDC power supply by at least 1A.
- Reset button - Press for 10 seconds to reset the camera and restore the factory settings.

GOAL SETTING

The models in this range are equipped with a fixed wide angle lens with focal length 3.6 mm, not adjustable. In these models, the lens is adjusted at the factory and should not be focused.

MOUNTING THE CAMERA

The cameras must be fixed to a wall or ceiling with the supplied dowels. The connecting cord extends through the bracket.

The camera housing is watertight and can be exposed to rain. The connections must be protected from the weather.

ASSEMBLY OF SATELLITE

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Each camera is equipped with 2 omni-directional antennas which must be screwed to the rear SMA connectors. The antennas do not need to be directional to the access point and can remain in a normally upright position.

CREDENTIALS

The cameras of the factory access Data:

USERNAME: admin PASSWORD:

12345

Networking

The cameras can be initially connected to cable in order to configure the wifi. The connection is the classic of all the IP cameras and consists in connecting the 12VDC power supply and the network cable to a switch.

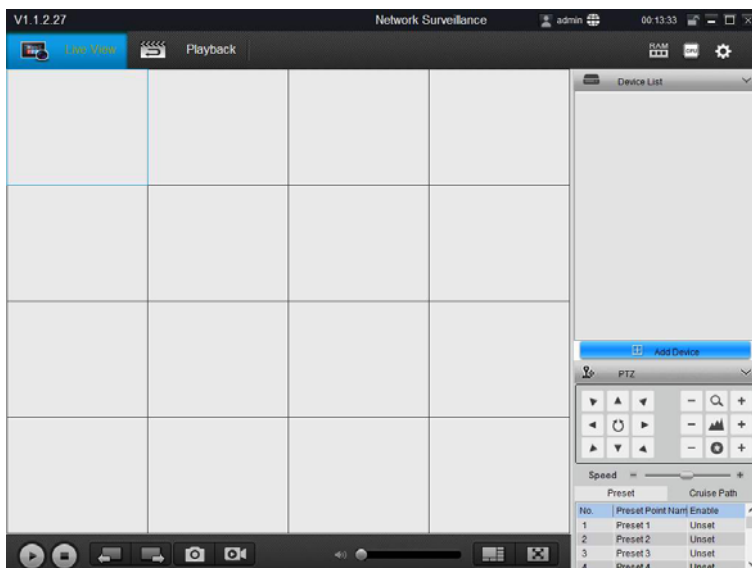
The cameras do not support POE being designed for a wireless use. After providing power to the camera via a 12VDC power supply and after having connected to the network you are necessary to proceed to the configuration of the network parameters in order to be able to make the cameras accessible by computer. The cameras are supplied with setting **DHCP address so the factory to automatically implement a coherent address with the network.**

SOFTWARE SmartClient - CAMERAS SEARCH

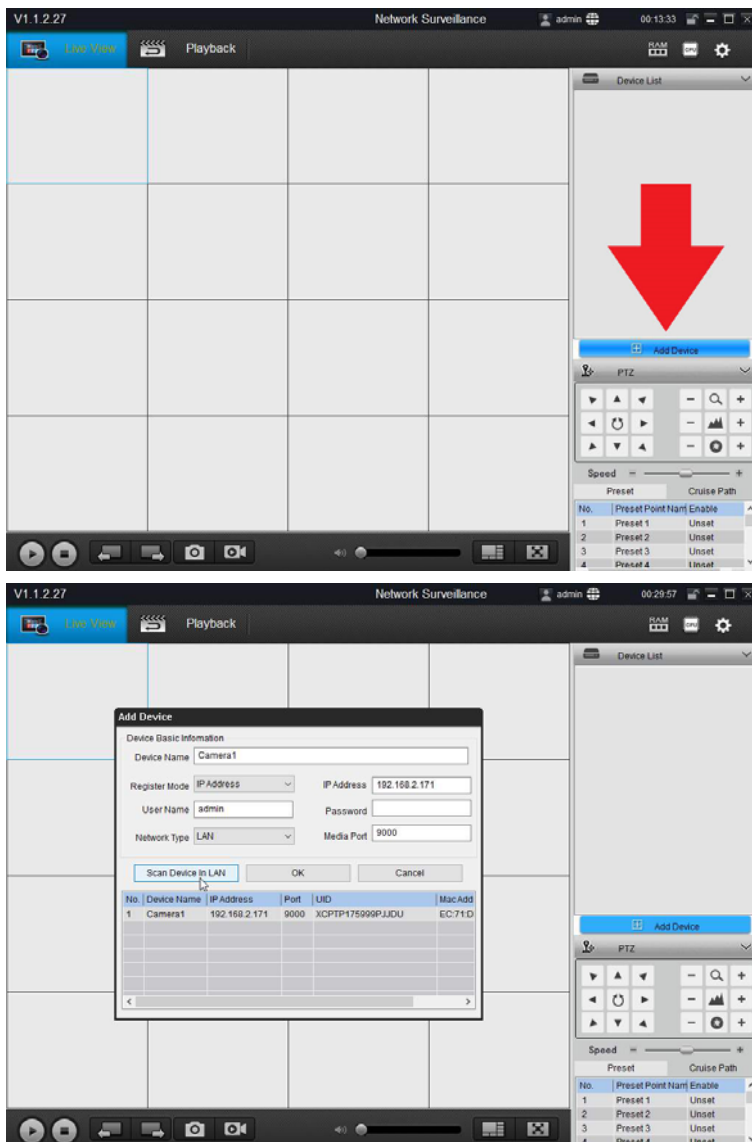
The CD supplied with the camera software is included **SmartClient**.

You first need to install it on your PC and run it.

The function of this software is to detect the presence of the camera in the network and allow the viewing and configuration.



To start press the button ADD DEVICE



The program searches all the RM Series cameras on the network and lists them in the window. To add them to the program just double click on the camera and insert the

Factory Access Password: 1 2 3 4 5 .

The cameras of the factory access Data:

USERNAME: admin PASSWORD:

12345

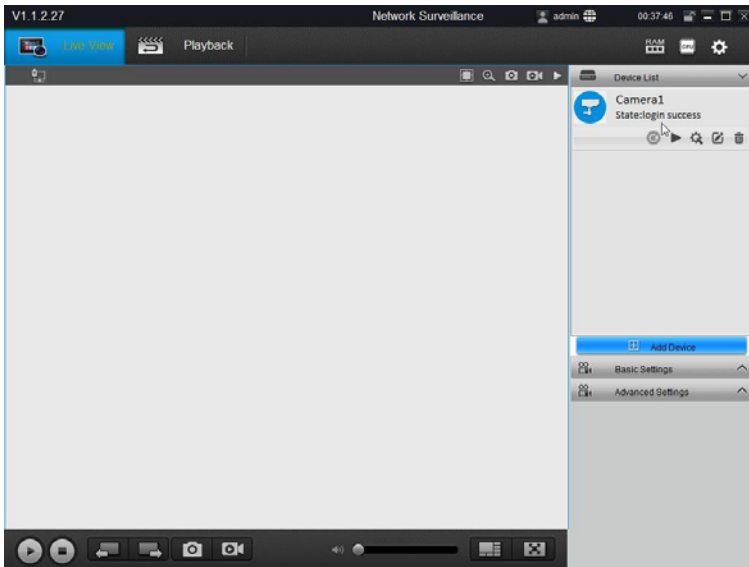
The other parameters can be left unchanged. Press OK and verify that the message LOGIN SUCCESS next to the camera.

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For in-depth information on using the SmartClient program refer to Instruction Manual



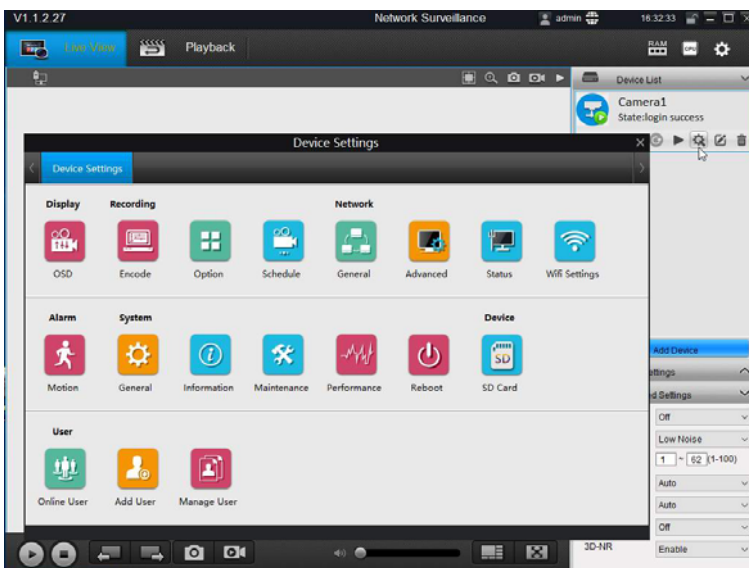
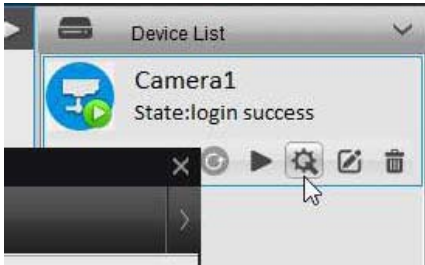
Wi-Fi Connection

Although you can use these cameras with wire liaison, their key feature is able to operate without network cable connecting to a Wi-Fi network. In order to do of course you need to have a Wi-Fi network and you have the place where you install the camera have good coverage.

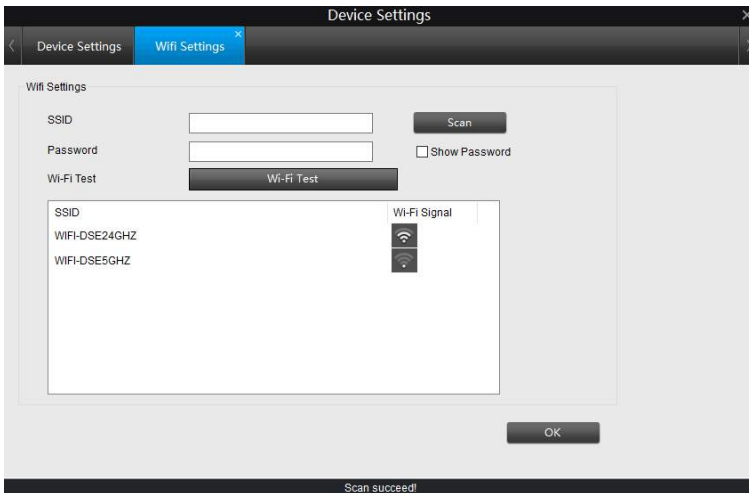
Pay particular attention to heavy obstacles, such as the home exterior walls, testing the reception of the signal at the point where you want to install the camera possibly using a smartphone.

Before you can connect to the wifi network camera must have it connected to its cable network, as seen in the previous chapter. This chapter explains how to turn on Wi-Fi connection to be able to then disconnect the hard-wired.

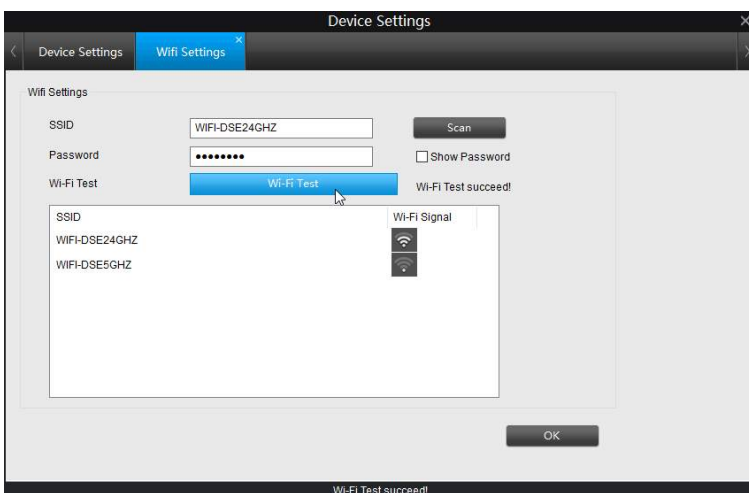
With the SmartClient program, first verifies that the camera appears correctly achieved by the program (LOGIN SUCCESS = green icon). Then get access to camera settings by pressing the small icon settings



Open WiFi settings by clicking the icon WIFI SETTING



The camera will search for available wireless network and lists them in the table, showing alongside the power of the available signal. E 'can repeat the scan by pressing the SCAN button. Now double click on the network you want to connect the camera and enter the access password. Then WIFI TEST awards to test and launch the connection



As seen in the example above, the appearance of WIFI TEST SUCCEED indicates that the network is available, and the password is correct.

If the connection to be successful you must check the signal goodness and your password is correct.

Press OK and then exit the program. At this point the camera is connected to the wireless network, and you can safely disconnect the network cable because from now on will no longer be necessary. Even if power is missing, the camera is able to reconnect to the wireless network autonomously.

Note that the camera attached to the wifi network takes on a different IP address than they had in the row connection. If you want to know the new IP that has been assigned by

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your network or use the Properties button again will search the cameras with ADD DEVICE button.

For in-depth information on using the SmartClient program refer to Instruction Manual



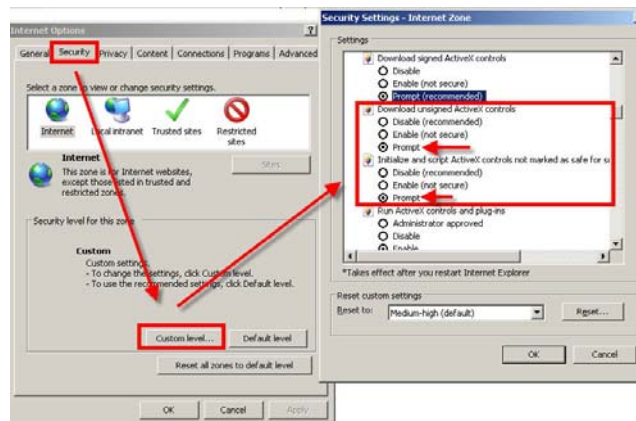
live viewing with browsers

You can access the camera, as well as with the SmartClient program, even with browsers

Internet Explorer and Firefox . On first access you will be prompted to download and install the plug-in needed for connection.

ENABLE PERFORMANCE OF ACTIVEX

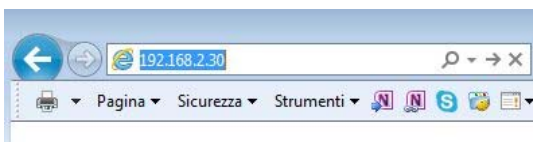
Internet Explorer has security settings that may prevent the installation of the ActiveX component. Before making the connections necessary to enable the execution of ActiveX not marked as safe. In Internet Explorer, select TOOLS / INTERNET OPTIONS



In the folder PROTECTION choose the area of interest (Internet or local network) and click CUSTOM LEVEL. Enable all items for the download and execution of ActiveX especially those NOT marked as safe. E 'can set the items either ENABLE or ASK FOR CONFIRMATION. Finally, save and restart the browser.

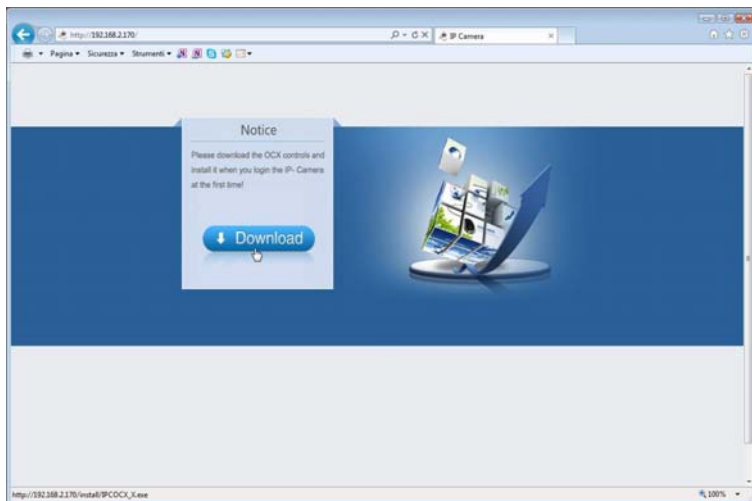
ACCESS WITH BROWSER

To access the camera using the browser needs to be entered in the address box, the IP address that you assigned. In the example below we perform a link on the internal network to the camera with IP address 192.168.2.30.

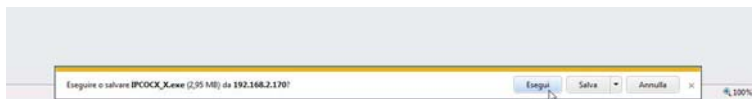


INSTALLING ACTIVEX

In order to make sure that the cameras are displayed on the browser you must install the ActiveX components. At the first access that carried out, the camera will detect the absence of these components and show a similar to the following window.



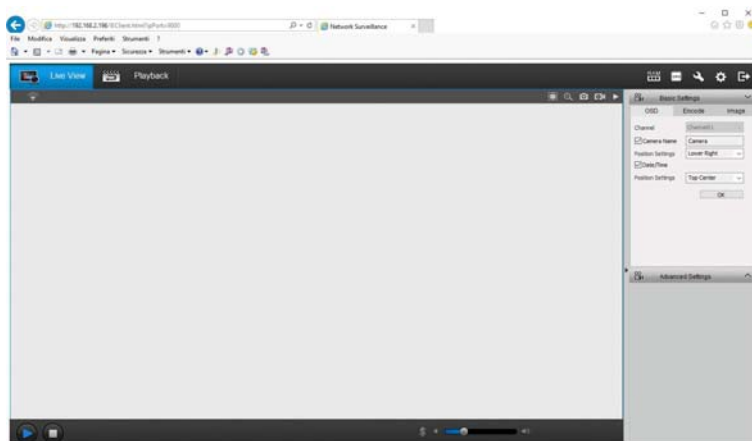
Click on DOWNLOAD to download the activeX components.



E can both run the program directly by choosing RUN to save the file on your local PC and then install it manually. Once the program is installed, your browser must be restarted.

LOG-IN

If the connection to the camera has good end it presents the window of log-in and you can proceed exactly as described above for the SmartClient software.



With the browser you can perform the same functions of SmartClient, including the viewing of footage on the internal memory (PLAYBACK), the configuration of the cameras and recording of video and photos PC

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Connecting player RTSP

The cameras support RTSP protocol factory is set to use port

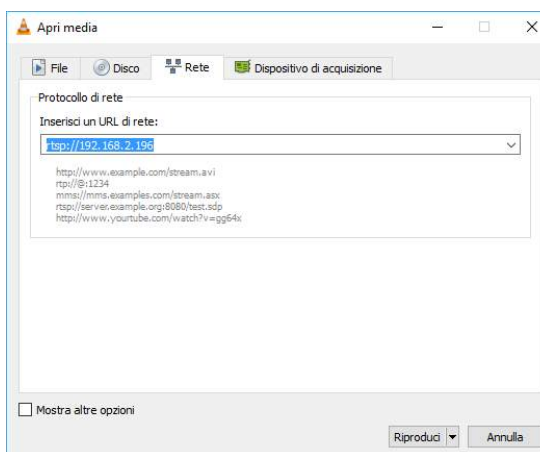
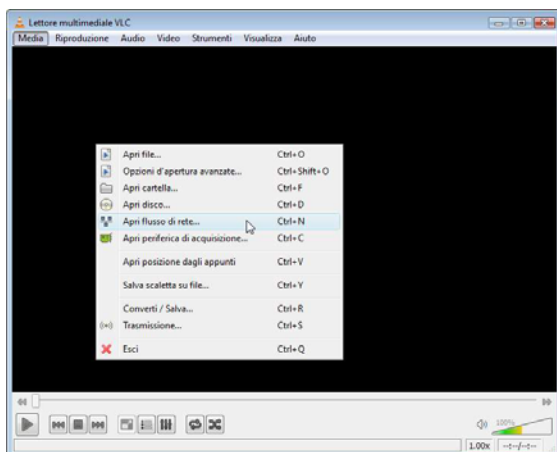
554. E 'can connect to the camera using any RTSP player such as VLC.

The address to call must have the following syntax: RTSP: // IP

Here's an example: rtsp:

//192.168.2.33

Below such as operate eg with the VLC player:





Login with ONVIF NVR

The RM series IP cameras, except wifi Kit, use the ONVIF standard protocol, now at version 2.4, and can be connected to any NVR or software that supports this standard.



To connect cameras to NVR or software ONVIF refer to the recording equipment manuals. As a rule, NVR recognize the communication parameters to communicate with the cameras automatically.

CAUTION

When loading an IP camera on a NVR is good NOT KEEP NEVER credentials (username and password) proposals from NVR, although both seem correct but still override them manually.



by Web access with Cloud P2P

The connection to IP cameras through the Internet is not made, as a rule, by calling individual cameras, but by connecting to the NVR. For this type of connection is necessary to refer to the dell 'NVR manual. E ', however, can also be web link directly to the cameras with the software or SmartClient application for Streamview smartphone. To make the operation as simple as possible, the RM Series cameras support the Peer-To-Peer (P2P) and allow you to connect via the web without having to static IP Internet technology, or configure your router's ports.

In this chapter we explain how the P2P connection, while in the next chapter will address the direct link to your IP that could use those who have a static IP address.

Each user of an RM Series camera acquires along with it the opportunity to enjoy free use of a P2P CLOUD service to its online service to make simple connection via the Internet.

This service can solve with a few mouse clicks the two main problems in connecting the Internet to the DVR, ie:

- **Signing of a DDNS service if you do not have a fixed IP Internet**
- **Mapping of router ports**

THE PROBLEM OF DDNS

To connect to an IP camera through the Internet you must know the IP address of the router that connects to the Internet. To find out which IP address has its own router from the WAN side that is towards Internet just consult the router configuration or by qualasiasi internal PC to the network visit a site like www.whatismyip.com or similar. If you can get from your Internet service provider (ISP) a **fixed IP address**, Just take note of this IP address in order to call your router at any time. Many times, however, the providers do not release fixed IP addresses or require the customer to purchase them. Without a router you will have a variable IP address may therefore modificarsi fixed IP over time making it impossible for the remote connection.

In this case you can use DDNS services that allow you to know at any time the IP address of your router / DVR, however, these services are thick paid but not always easy to set up.

With CLOUD services you do not need or get a fixed IP address from your provider, or



subscribe a DDNS subscription.

MAPPING THE PROBLEM OF THE DOORS

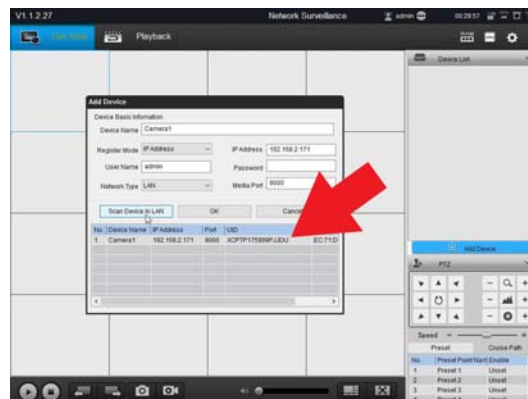
Almost always between the camera and the Internet it stands a ROUTER. This device can become a major obstacle in connection to the DVR because it prevents external calls to penetrate to the internal network. To allow this step you need to enter the router programming of mapping instructions which we discussed in earlier chapters.

Operate these instructions is not always easy because each router has its own configuration menu terminologies to rules often not unique.

In addition to this difficulty you may find yourself in situations where the router configuration is inhibited by the provider or not possible due to complexità the network scenario. With CLOUD services of MRI cameras, thanks to P2P technology can connect without the need to perform any configuration on the router, and you will be ready to be accessed remotely in minutes.

THE SERIAL NUMBER (UID) CAMERA

The camera you bought is already registered in our Cloud servers and is distinguished by a unique identification number (UID). The camera's serial UID you can easily read the SmartClient program in advanced network settings, or by using the search button of the network cameras.



The UID identifies your camera in our cloud server and allows you to reach it via the Internet at any time.

If you have uploaded the camera on SmartClient program or Streamview THE APP (see below) in your local network, you also automatically recorded its UID and you can reach the camera even if you find yourself out of your network, but without doing anything. If you want to record on SmartClient or Streamview a remote camera, attached to another network, then you must manually enter the login information in the following manner.



Add Device

Device Basic Information

Device Name

Register Mode UID

User Name Password

Network Type Media Port

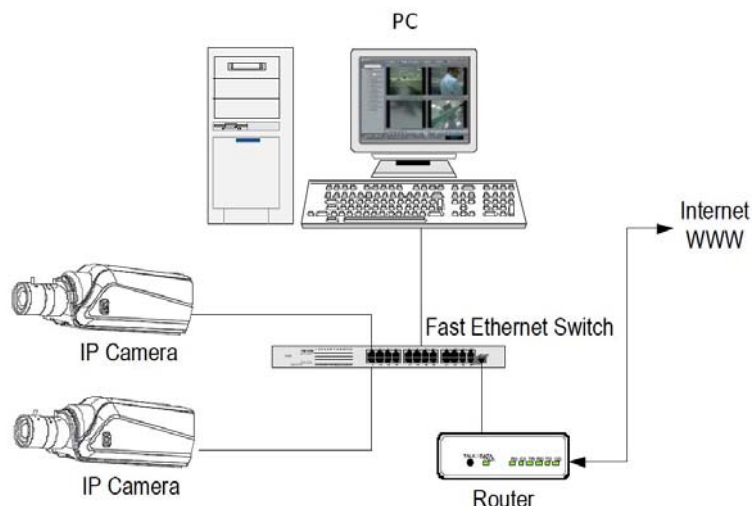
Direct access from web

If you have an IP address on the Internet static, you can link directly to your IP, without depending on our P2P server.

To do this you need to make a configuration inside the router following the directions in this chapter where we explain the mapping of the communication ports.

MAPPING WITH WEB ACCESS DOORS ROUTER

An installation of IP cameras is often placed inside a LAN connected to the Internet via a router as in the following scheme



If we use for viewing the cameras internal PC to the network, the addresses of the cameras (usually the 192.168.XXX.XXX type) are directly accessible. If you wish to connect via the Internet using a PC placed elsewhere, the internal network addresses will no longer be reached directly, because the only IP address visible from the web will be what our router will by its WAN side that is towards the Internet outside world.

This address is assigned by the provider (ISP). And 'advisable to get from the provider a fixed address each time you connect. If there is a chance you need to use DDNS services (see configuration manual).

It is not sufficient, however, type in the browser the IP address of the WAN side Router to connect to the cameras. The router acts as a filter and drops every external call that a call from within the network is not paid before. In order to connect the cameras it is therefore necessary to insert inside the router ports of directing instructions which, depending on the router manufacturers are called NAT, PORT FORWARDING,



PORT MAPPING etc.

In practice, access the router configuration and insert instructions so that this direct calls coming from outside, to the inside IP address of the cameras. Obviously the directing is only performed for the communication ports that are used by the cameras and that will be detailed below.

The communication ports used by the factory RM Series cameras are as follows:

- **HTTP PORT:** Default 80. The cameras use this port to communicate with browsers like IE. Browsers such as Internet Explorer use the factory port 80 for communication. For example, if we type in the bar

browser address:

http://212.12.34.201 will be called the IP address 212.12.34.201 on port 80. If in the configuration of the camera is set to a different HTTP port (eg. 81, 82, etc.) it needs to be clarified in the browser which port to use for the named after pointing the address with ":" to separate it. If, for example. http://212.12.34.201:81 we type will be called the IP address 212.12.34.201 port 81.

- **MEDIA PORT:** Default 9000. The cameras use this port to send streaming video and to communicate with the SmartClient program.
- **PORT RTSP:** By default 554. E 'used by the camera to send the RTSP video clients such as VLC, Real Player etc.
- **PORT ONVIF:** Default 8000. E 'used by the camera for dialogue with NVR software and ONVIF

If behind the router counts more than one camera and you want to reach them individually from the outside you must be assigned to each of them a different average door. For example 9000, 9001, 9002 etc. . If access is made via browser you must do the same for HTTP ports 80,81,82 etc.

In the NAT router settings you will have the direction of each door towards the inside address of the own camera.

Note that many routers require that each directing NAT is also combined with a rule in the firewall section that determines the opening of the affected port. Consult your router's manual for details on how to program the port mapping