IP cameras

When do I need an IP camera?

IP cameras are connected directly to a network. IP cameras are especially useful to film for example at a remote location and receive the video files through an Ethernet network on your computer.

Network requirements

To use MediaRecorder with IP cameras, the following network requirements apply:

- An Intel Pro/1000 CT or Intel Pro/1000 PT (1 Gb) network adapter is installed in the computer with MediaRecorder.
- The cables are suitable for Gigabit Ethernet. The minimum cable quality is CAT5e.

See https://en.wikipedia.org/wiki/Category_5_cable

- We recommend to use a dedicated network.

Install and setup

If you bought a complete solution from Noldus IT, the network adapter is present in the computer, the IP cameras are set up and the MediaRecorder settings are made. If you bought your cameras and MediaRecorder separately, you must do the installation and setup yourself.

See Set up IP cameras

Supported IP cameras

- Axis M5525
- Axis M1075
- Axis M1375

Cable length

In theory, for IP devices, a cable length 150 m should be possible. However, it has not been tested by us. We know that a setup with a cable of 1 m and an extension cable of 50 m with a switch between the cables works well with MediaRecorder.

Notes

ONVIF Profile S

ONVIF is a communication standard for network devices. ONVIF Profile S applies video and audio streaming and PTZ control. Most IP cameras nowadays support ONVIF Profile S. For cameras that do so, pan, tilt, and zoom

control can be done with MediaRecorder and audio from the camera can be recorded. For cameras that do not support ONVIF, pan, tilt, and zoom control must be done with a browser and audio must be recorded with a microphone connected to the sound card of the computer.

Power over Ethernet

IP cameras can be connected to a PoE (Power over Ethernet) or PoE+ switch to supply them with power. This way no extra power cables are needed. Each device is connected to one channel on the switch. A PoE switch can deliver up to 15 Watt per channel. A PoE+ switch has a higher capacity per channel (up to 30 Watt per channel). Make sure that the maximum total capacity of the switch is high enough for all cameras together.

Cameras may also be powered using a 2 or 4-port Network Interface Card (NIC).

Example - you connect four cameras that need 30 Watt each to a POE+ switch. This POE+ switch must deliver at least 4 x 30 = 120 Watt.

- Axis M5525 - requires a regular PoE switch.
- Axis M5054 - requires a regular PoE Switch.
- Axis P1375 - requires a regular PoE switch.

The PoE or PoE+ switch must allow a speed of at least 1 Gb per second.

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