

Requirements are increasing

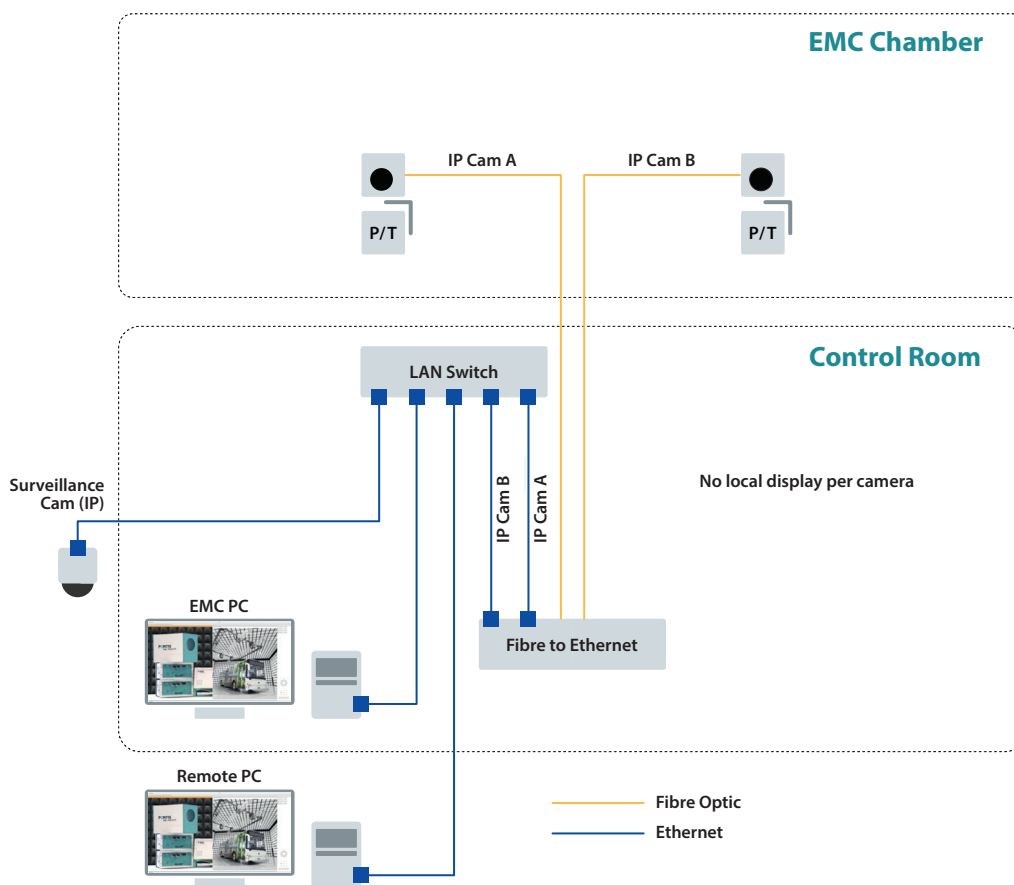
In the past surveillance systems for EMC test sites mainly viewed the video in the control room next to the anechoic chamber. But requirements grow: The management wants to see what is going on the chamber or customers want to view the test without being allowed to interfere.

Some times additional non-shielded cameras are placed around the chamber at the doors or the loading zone.

Network access to the cameras

There are two options to implement IP access:

A) All cameras used are IP models

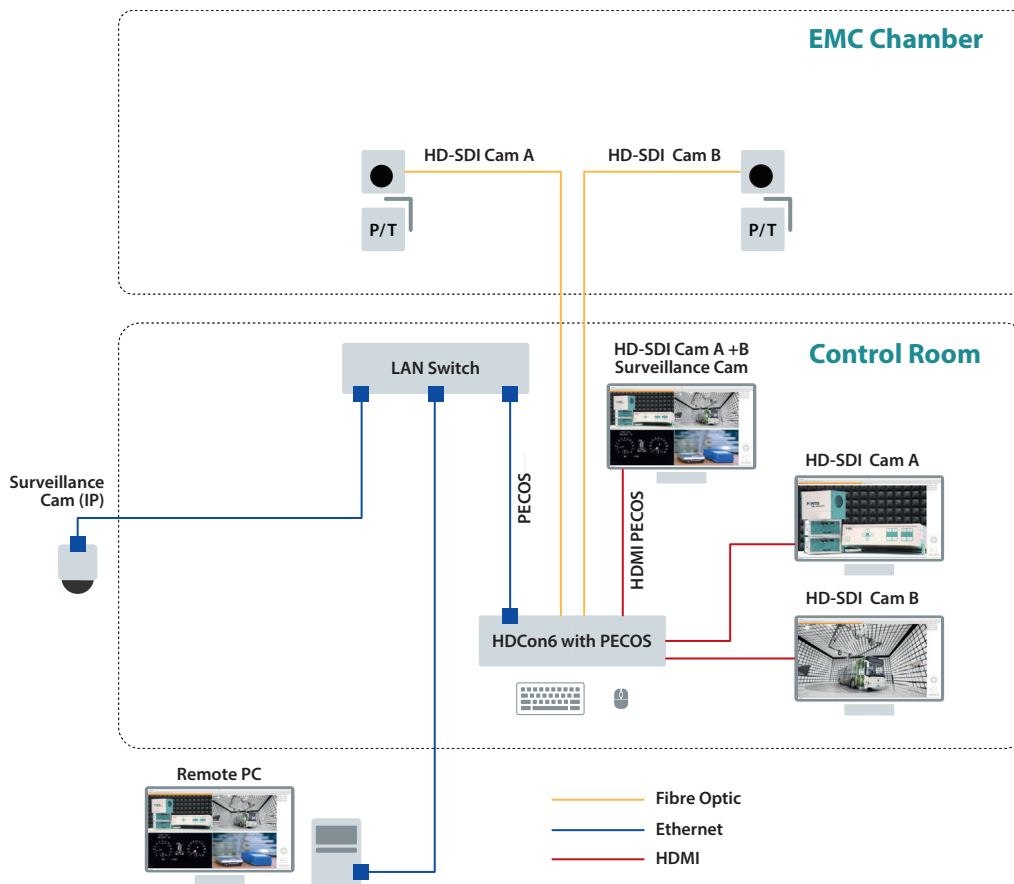


PRO:

- They can be viewed on any PC with video surveillance software.
- No special video controller is needed

CON:

- Only compressed video with corresponding latency up to 1 second is available. With some immunity tests this can be critical.
- Special features like recording, projects and event detection are not available. To use these features you need additional special software, if available at all.

B) The EMC cameras are non IP and connected to a camera controller

PRO:

- Uncompressed video, almost no latency locally and best video quality possible. This can be crucial e.g. when looking at displays.
- Special features for EMC cameras available: Modern camera controllers like the PONTIS EMC HDCon6 offer a variety of special features.
- Network access to the cameras via the controller: Although the cameras are not directly connected to the network, the controller is importing the video by a frame grabber and retransmits it to the clients in the network.
- Add cameras to controller: Sometimes it may be needed to connect more cameras to the controller than channels are available. Then shielded IP cameras can be used (e.g. PONTIS EMC IPCam72).
- Non shielded IP cameras can be integrated: The controller can access and show any IP cameras in the network that support OnVIF. This can also be off the shelf, unshielded IP cameras for surveillance outside the chamber (e.g. amplifier room or loading zone).

CON:

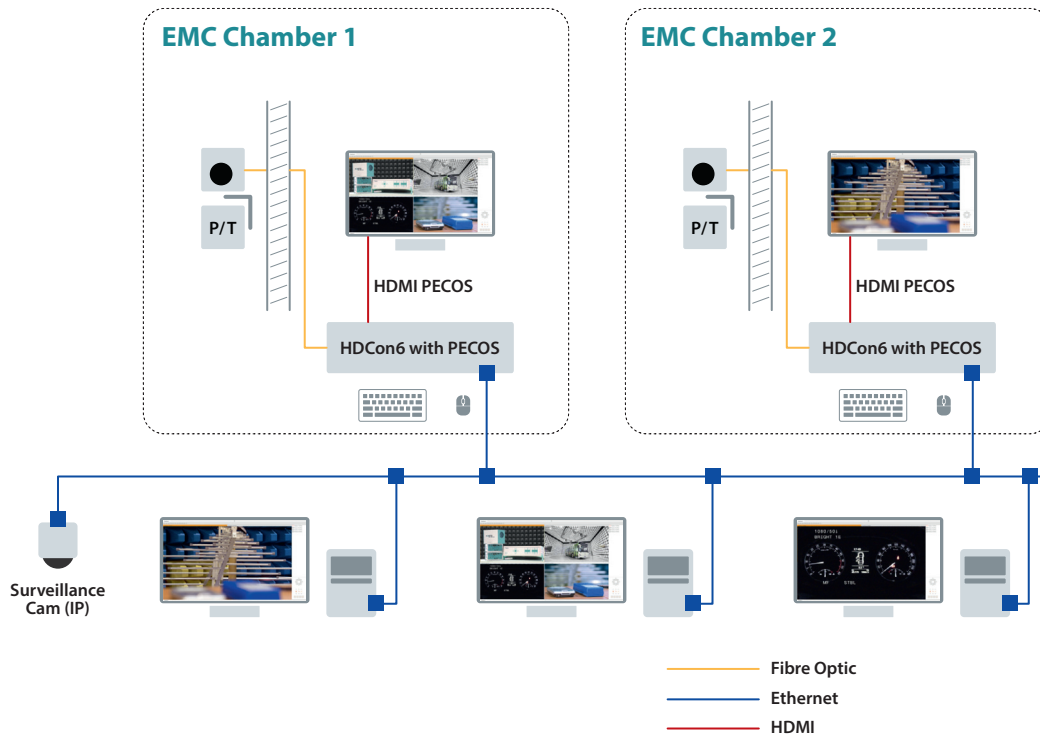
- Special controller needed: A special controller is needed. But as it offers many features in one device, the total cost is even less than with individual PCs and software.

Access of local EMC cameras via the network

PONTIS EMC PECOS allows to access all EMC shielded cameras on a site from multiple PCs.

Each HDCon6 camera controller running PECOS can drive up to four HD-SDI cameras plus multiple IP cameras. If several HDCon6 are used they can all be accessed via LAN from any PC in the network.

Move the camera, record, replay, make snapshots – you have full control.



Ethernet in device under test

More and more devices use Ethernet for communications especially in the automotive domain.

For this shielded converters for Ethernet and BroadR-Reach (automotive Ethernet) are needed.



If many Ethernet ports need to be connected, a shielded switch like the PONTIS EMC foEthernet4c can be useful. It offers four electrical and one optical port. The optical can be used to feed the Ethernet signal from the chamber to the control room w/o any interference.

POE (Power Over Ethernet) gets more and more popular. As the mains power needs to be injected in the chamber, a shielded POE adaptor is quite useful. Also available from PONTIS EMC.