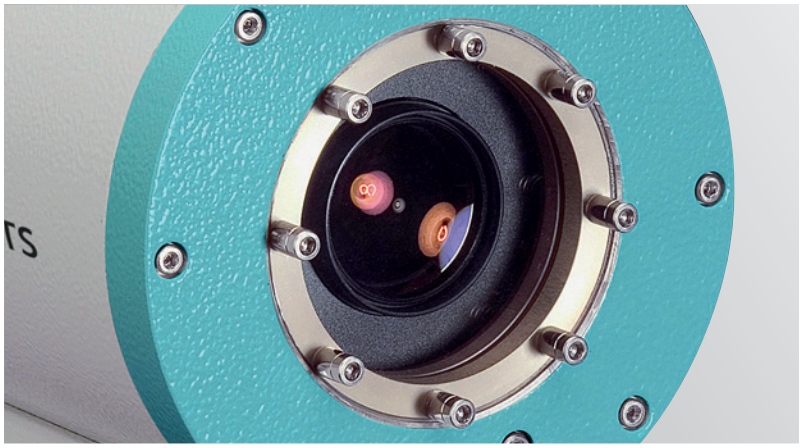
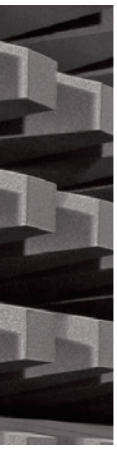
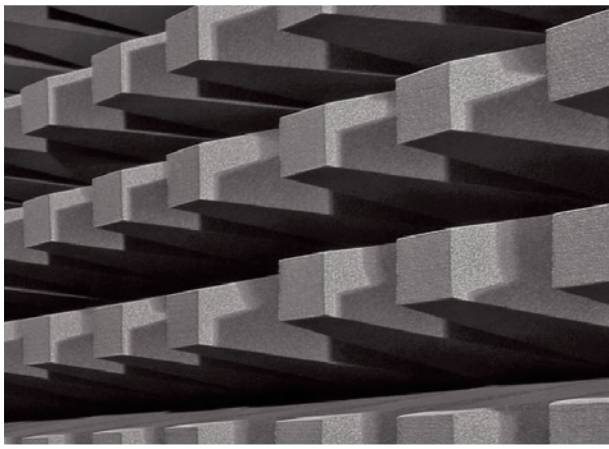


PONTIS
EMC PRODUCTS
A BRAND OF AUDIVO





EMC Hardened Audio and Video Systems

www.pontis-emc.com

PONTIS
EMC PRODUCTS
PONTIS
EMC PRODUCTS

EMC Hardened Audio and Video System

During EMC testing it is important to monitor the device under test (DUT) without interfering with the measurement during emission tests. On the other hand, the monitoring system has to withstand the high field strengths during immunity testing.

Field Proven Quality MADE IN GERMANY

Since 1995 we have been producing EMC hardened devices "Made in Germany". More than 2000 PONTIS EMC cameras are installed in test sites all over the world. EMC chamber suppliers and customers trust in our solutions. The extremely low defect rate is the result of a consistent quality management system and intensive testing.

State of the Art Technology

EMC shielded housing, specially filtered power supply and signal transmission, via fibre optics, are common to all our products. For that reason the emissions are below the standard limits and the immunity above the usual requirements (up to 200 V/m CISPR 22 Class B and higher).

Only the highest quality components are used in our products. Thus we can ensure that the mechanical and even more the optical features of our camera systems are outstanding.

Local Support

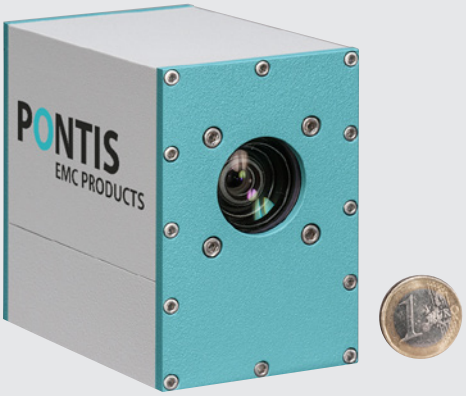
We offer local sales and technical support through our sales partners.

www.hvtechnologies.com

www.toyo.co.jp

zongkui.shao@pontis-emc.com

More countries on www.pontis-emc.com



The Right Solution for Every Test Set-Up

Our wide variety of shielded products offers a suitable solution for every test set-up from small pre compliance EMC chambers to huge industrial, military or automotive test sites.

We offer cameras from a small manual version to HD cameras with up to 40times optical zoom.

For the integration in existing Surveillance systems we offer IP-Cameras with ONVIF support.

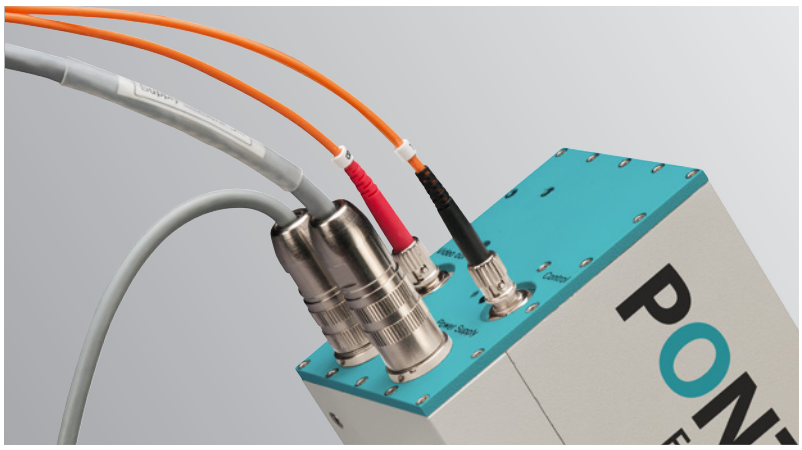
Our systems work in international environments and standards:

HD-SDI, HDMI, 110 V, 230 V, 50 / 60 Hz, RF Immunity (ISO 11452) 200 V/m to 18 Ghz (40 GHz available), CISPR25 Class B, HIRF (RTCA DO 160 G) – up to 3,000 V/m / RTCA DO 160 Q – 1,000 V/m up to 18 GHz. up to -20 dB.

For applications with difficult light conditions (e.g. displays in cars) our cameras offer additional control functions for Iris control, wide dynamic range and long exposure.

High Definition Video (HD 1080 p)

Modern mobile devices and also PCs and TVs use displays with very high resolution. In this case the analogue video may not offer enough resolution. The latest series camera offers a HD video uncompressed format (HD-SDI) with resolutions up to 1920 * 1080 pixels from sensor to display. In order to control and handle these massive data streams the HD Cameras need to be connected to HD-Controllers.



Fibre Optic Converters

In complex testing environments it is often needed that electrical signals have to be transmitted into the chamber or out of the chamber to the test equipment. For that purpose we offer a variety of different transmission lines that convert electrical signals into optical signals and back. Such the signal can be transported via fibre optics and is immune against electrical fields.

Our converters can withstand field strengths up to 200 V/m. They are either battery operated or via mains.

Besides the general range of converters like HDMI, USB, RS232, RS485 or Ethernet we also offer special converters for **automotive applications** CAN, LIN, 100Base-T1 (BroadR-Reach) and converters for e-mobility, which work with all majors standards for electrical charging stations.

Acoustic Surveillance and Intercom System

In many cases it is necessary that noise or acoustic signals issued by the DUT need to be monitored. For that purpose we offer an EMC hardened audio system, which connects a microphone and a speaker in the chamber with a microphone and a speaker in the control room. An automatic gain adjust and automatic switching between listener and talker make the communication smooth and easy. This system can be integrated in the video system or used separately. All signals are transmitted via fibre optics.

For detailed acoustic surveillance we offer a digital version with a calibrated transmission line, which can be used to measure the actual sound level in the chamber.

A multi point intercom system with fixed and portable units is also available.

Multi Controllers

In larger test sites it is often required that more than one camera and/or intercom system are controlled from one workplace. We offer controllers to drive up to 4 cameras and/or audio interfaces. To meet the various demands we offer three types of controllers: basic economic, regular / modular which can be extended by options and high demand by Audivo's own "built in" seamless HW-SW solution PECOS.

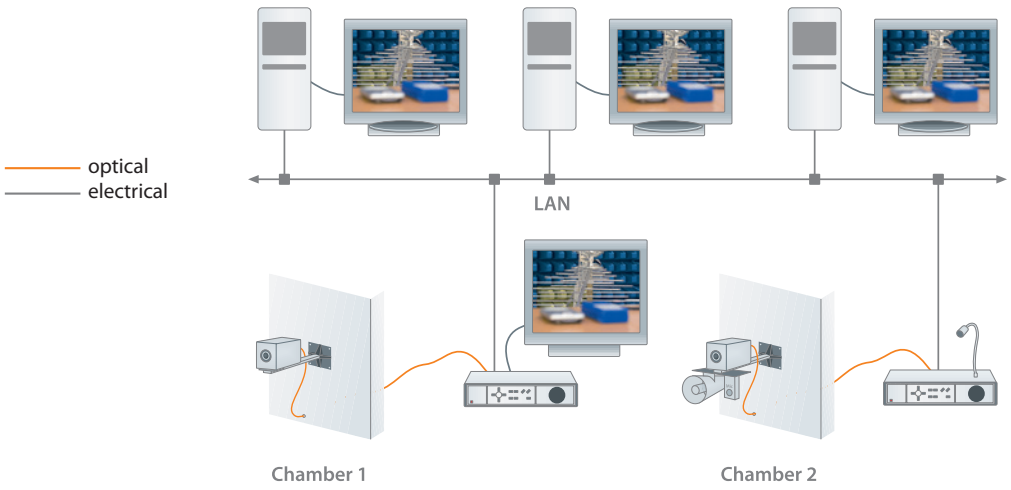
Control via Network and Documentation: PECOS

If the cameras have to be accessed from different workplaces and / or if the video streams of the cameras need to be recorded, LAN and DVR/NVR (digital video recording and network video recording) and storage is needed. All our controllers can be connected to external recording devices.

With our HDCon6 series of controllers the recording and network access is integrated. There is no separate PC needed.

With PECOS, the control software in the controllers, all functions of the cameras as well managing recordings can be accessed via network. A local keyboard and Monitor can also be used.

Multiple cameras can be displayed on one High resolution monitor.



Automated Testing with PECOS

Besides the control of all camera functions and recordings PECOS has an integrated event detection to register changes or faults during immunity testing.

The following events can be configured and generate an alert when detected:

- Motion
- Audio
- Colour
- Blinking
- Text and numerical values

PECOS also provides an XML based IP interface to EMC Test SW via which information of the DUT can be displayed on the screen and stored. All events can be fed back to the EMC test SW and trigger specific actions.

Overview of Products

Video Cameras (200 V/m)

Cam5x	Miniature SD FBAS video camera with manual and remote zoom (-10 dB, 600 V/m stripline)
HDCam6x	HD video camera with HD-SDI interface (30 x zoom, full HD from sensor to display), integrated audio transmission
HDCam7x	HD video camera with HD-SDI interface (30 x zoom, full HD from sensor to display, -20 dB), integrated audio transmission
IPCAM7	HD video (1080p) with LAN/IP interface

Controllers for Audio and Video

Modular – ECO

Con4eco Economic for basic demand: HD-SDI (1080p), 1 or 2 cameras

Options: AUD: Audio intercom
NVR: external network video recorder
JS: Joystick for easy control and special functions (e.g. iris control, frame rate)

Integrated – LAN

Con6x LAN-PECOS HD-SDI (1080p), 1 to 4 cameras, PONTIS own HW-SW solution fully integrated in controller with Linus PC inside. PECOS-SW for local and remote control, recording and replay (DVR function)

Options: AUD: audio intercom
SW-IF: Interface to EMC test software (e.g. EMC32, Toyo and others)
SW-Event: Special SW for automated immunity testing (event detection)

Special Applications

Uni- or bi-directional audio intercom. Multipoint solution available

HeadSet for fixed or portable audio intercom units, for up to 7 channels

Head Restraint Adaptor to mount video camera e.g. inside vehicles

NEMP Camera

Specially shielded camera to withstand extremely high field strength e.g. NEMP, lightning.

IR Thermo Camera

Shielded IR thermo camera to monitor the heat of EUT or chamber.

Fibre Optic Converters (EMC Shielded)

foEthernet/LAN	**foUSB2.0**	**foRS232**	**foCAN**
foLIN	**foHDMI 1.2**	**foRS485**	**foCharge (e-mobility)**

100Base-T1 (BroadR-Reach) Automotive version

More converters on www.pontis-emc.com

PONTIS EMC PRODUCTS
A BRAND OF AUDIVO

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