**HYPERSPECTRAL IMAGER**

HI 90

Identify invisible gas clouds even from long distances

Innovation with Integrity

HI 90 is a hyperspectral imaging remote sensing system based on a FT-IR spectrometer equipped with a focal-plane-array (FPA) detector combined with video cameras.

This system enables the automatic identification, visualization, and quantification of gas clouds (including hazardous gases) in real-time even across large distances. The FPA detector also adds the versatility to identify small gas clouds in addition to larger emissions.
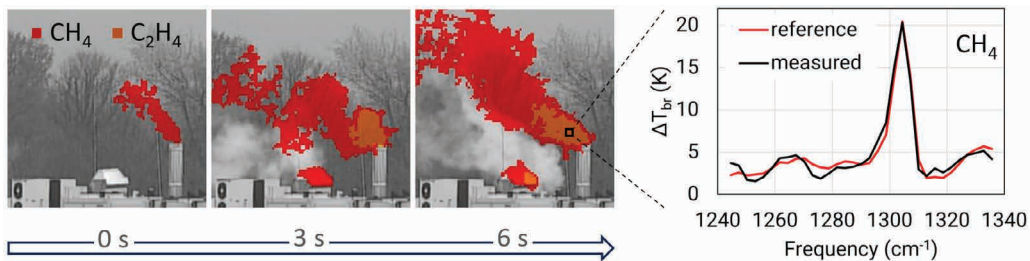
Visualization and spectral identification of natural gas emitted from a smokestack using a HI 90 system.

Proven Performance

The HI 90 has been used for years to monitor high-profile sporting events, political summits, and for rapidly assessing risk in chemical accidents.

Tomography

When a gas cloud is identified by two HI 90 systems from different directions, a 3D model of the cloud can be generated by tomographic reconstruction, revealing the position of the cloud in 3-dimensional space.

3D modul of gas cloud
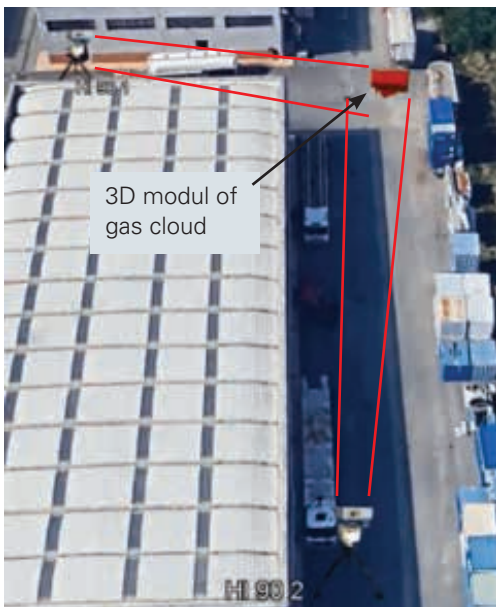
Tomography of a gas cloud using two HI 90 systems.

Laser class 1 product.

Key features

- Automatic identification and visualization of gas clouds in real-time
- Passive long-range detection
- Low detection limits
- Automatic radiometric calibration
- Large libraries of reference spectra
- Actively aligned, friction free plane mirror interferometer
- High-resolution focal plane array

Typical applications

- Identification and visualization of hazardous gas clouds at accident sites
- Monitoring of high-profile sporting and political events
- Monitoring of industrial facilities
- Identification of sources of air pollution
- Study of volcanic gases
- Cultural heritage analysis

Bruker Optics GmbH & Co. KG
info.bopt.de@bruker.com

bruker.com

Bruker Optics is ISO 9001, ISO 13485, ISO 14001 and ISO 50001 certified.

Worldwide offices
bruker.com/bopt-offices

Online information
bruker.com/HI90