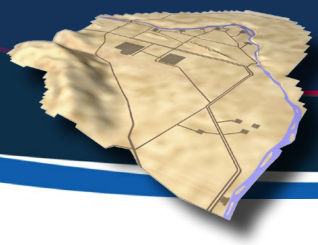


Overview

UV-DOAS

The Ultra Violet - Differential Optical Absorption Spectroscopy (UV-DOAS) is one of the optical spectrum analyzers providing real-time monitoring for the Pilot-Scale Vapor Demonstration and Testing. The optical spectrum analyzers transmit electromagnetic energy on the near-visible range. The energy travels through the gas field, to one or more reflectors, and then the returning spectra is evaluated to determine what gasses were encountered along the way.

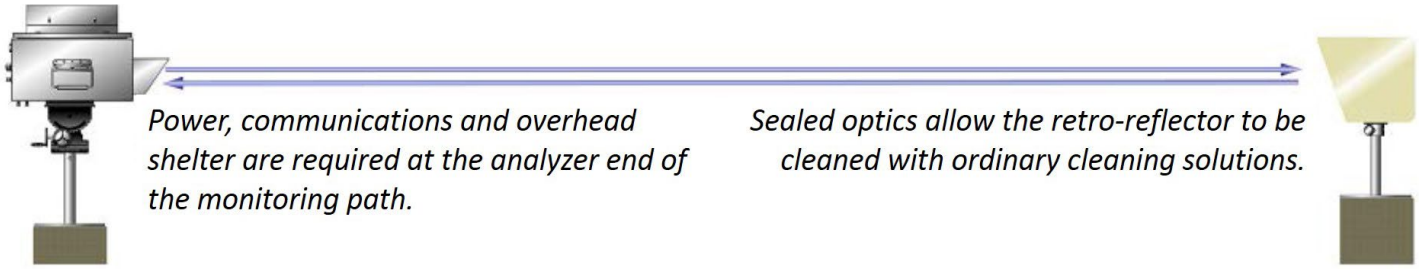
The UV-DOAS provide ultra violet analysis of a sample volume inside of the instrument. Ultra violet and infrared optical gas analysis along a closed path (small chamber where light passes through the sample many times, reflected back-and-forth via mirrors), where a sample is drawn inside the instrument in an application like an exhaust stack.

Differential Optical Absorption Spectroscopy: the difference between the transmitted and received energy spectra are evaluated.

- Fixed, line-powered, real-time analytic devices
- Real-time data transmission via wireless communications
- Sentry-MS mounts to a precision pan and tilt head used with a tripod
- UV Spectrometer - Advanced: the UV Sentry Transceiver is made up of focusing optics, a high-resolution UV spectrometer, a computer, and control and communication electronics.

Chemicals Detected

UV Spectrometer
Nitric Oxide
Sulfur Dioxide
P-Xylene
M-Xylene
O-Xylene
Oxygen
Ozone
Benzene
Toluene
Ethylbenzene
Acetaldehyde
Formadehyde
Ammonia
1-2-4 Trimethylbenzene
1-3-5 Trimethylbenzene
Styrene
1,3 Butadiene



Power, communications and overhead shelter are required at the analyzer end of the monitoring path.

Sealed optics allow the retro-reflector to be cleaned with ordinary cleaning solutions.

UV Transceiver Unit
(Xenon or Deuterium based)

Contact:
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