

The Ultra Violet - Fourier transform infrared (UV-FTIR) 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.

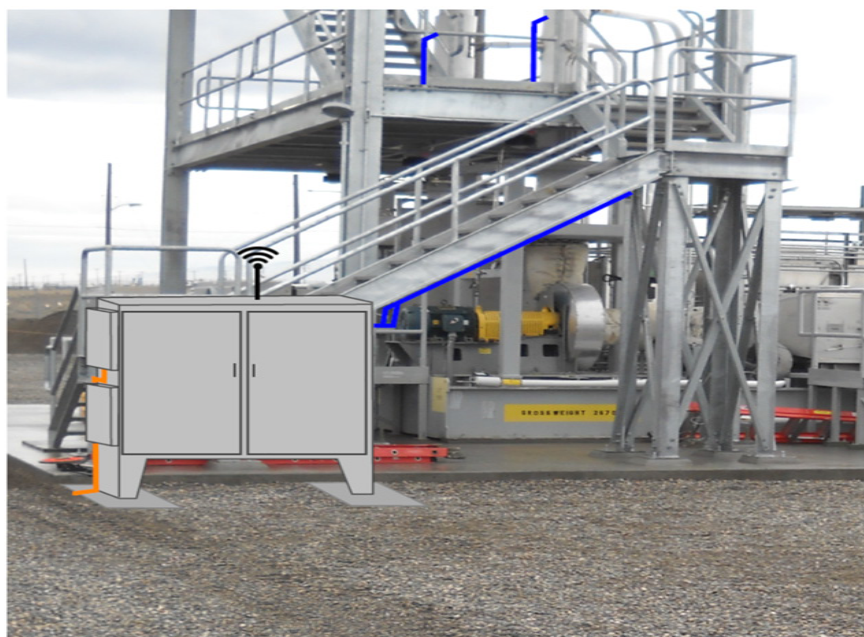
The UV-FTIR provide both Ultra Violet and Infrared analysis of a sample volume inside of the instrument.

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 sample is drawn inside the instrument in an application like an exhaust stack.

- Fixed, line-powered, real-time analytic devices
- Real-time data transmission via Wifi wireless communications
- UV and IR provided by dedicated PC, UI, and data storage
- FTIR Spectrometer - Field Stabilized, rugged interferometer. Cryocooled single element MCT detector with a range of 2 to 14 microns. 1 wavenumber nominal resolution. Actual measured resolution is <.5 wavenumbers. All ZnSe optics to avoid susceptibility to humidity (non-hygroscopic).
- UV Spectrometer - Advanced, ultra-low noise, miniature spectrometer with TE-cooled solid state detector array. Optimized grating for detection of the widest range of gases. Deep UV capability beginning at 200nm.

Chemicals Detected

FTIR Spectrometer	UV Spectrometer
Nitrous Oxide	Nitric Oxide
Ammonia	Sulfur Dioxide
Methane	P-Xylene
1,3-Butadiene	M-Xylene
Benzene	O-Xylene
1-Butanol	Oxygen
Methanol	Ozone
2-Hexanone	Benzene
3-Buten-2-one	Toluene
Formaldehyde	Ethylbenzene
Acetaldehyde	Acetaldehyde
Butanal	Formadehyde
Furan	Ammonia
Acetonitrile	1-2-4 Trimethylbenzene
Propanenitrile	1-3-5 Trimethylbenzene
Ethylamine	Styrene
N-Nitrosodimethylamine	1,3 Butadiene
N-Nitrosomorpholine	
Tributylphosphate	
Pyridine	
Methyl nitrite	
Butyl nitrite	
Methyl Isocyanate	
N-Nitrosodiethylamine	



Weather Proof Enclosure

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