PTR-TOF-MS Mobile Laboratory Services



Mobile Laboratory Services

Empower your environmental management wherever it's needed with Sensible EDP's Proton Transfer Reaction Time-of-Flight Mass Spectrometer (PTR-TOF-MS) Mobile Laboratory. This advanced, on-the-go solution revolutionizes real-time detection of organic and inorganic compounds at ultra-low levels, providing precise insights on-site. Benefit from data-driven decision-making, enhanced compliance, and the flexibility to monitor in multiple locations - optimizing processes, improving safety, and strengthening community relations.



Mobile Monitoring Where It Matters



Real Time Data & Insights



Ultra-Low Detection Capabilities

Drive Compliance Forward with Mobile Lab Applications

- Enhanced Fenceline Monitoring: Use GPS and MET data to map molecule concentrations
- Odor Source Allocation: Use multivariate analysis (MVA) to determine correlations and causations.
- Fugitive Emission Detection: Accurately identify and measure *while moving*
 - Emergency Response Preparedness: Instant analysis for quick decisions

- Industrial Hygiene: Detects thousands of volatile compounds with precision
- Definitive Source Allocation: Know exactly where emissions originate through triangulation
- Ultra-low Detection Capabilities: Ensuring Title V Declassification Compliance



Leading the Way With the Latest Technology

Montrose uses the most advanced and updated PTR instrument sold around the world. Plus, we've optimized the instrument's use to produce an EPA-approved Other Test Method (OTM) to allow the use of PTR in compliance testing by direct measurement or Gas Chromatograph (GC) integration. Pioneering in our approach, Montrose has integrated a GC into the system to allow for isomer speciation and meet EPA Reference Method 18 QA/QC requirements while allowing GC column changes as necessary to address specific classes of organic and inorganic target compounds – an innovation unmatched in the industry.

How It Works

- 1. We collect an air sample outside the van
- 2. Mix it with the a reagent gas selected for reactivity to a given compound
- Molecules are separated by mass and quantity in an ionization chamber, enabling us to quantitate how many are in the sample
- 4. Leveraging GPS and MET data, we map out compound concentrations to pinpoint the source
- 5. For odor allocation, we use multivariate analysis (MVA) to identify causations and correlations

Our Mobile Lab Features the Following Systems and Equipment:

- Ionicon Model 6000 X2 Proton Transfer Time of Flight Mass Spectrometer
- Environics Model 4000 Gas Mixing System Millennium Instruments Heated Dilution System
- SRI Model 8610C Gas Chromatograph
- MKS Instruments Model 2030 G MultiGas[™] Analyzer
- Millennium Instruments Sampling
 System
- Columbia Weather Systems Magellan MX 500 Weather Station
- Teledyne Model T701H High
 Performance Zero Air Generator



Discover how Sensible EDP can help your business stay compliant with regulations and effectively manage emissions.

Contact our sales team today for a customized monitoring solution tailored to your specific needs and requirements. Embrace the future of compliance and environmental stewardship with Montrose Environmental Group's Sensible EDP.

sensible-edp.com