



# next generation detection

## OwlSens-T - Advanced Chemical Sensing

Portable & Fixed Site Chemical Detection & Monitoring

OwlSens-T is the first of its kind, next generation, gaseous and volatile chemical monitor. Capable of detecting more chemicals than any other single detector, OwlSens-T's key features include:

- **EXTREME SENSITIVITY** – Detection limits to parts-per-billion
- **SELECTIVITY** – Exceptional ability to resolve similar chemical compounds
- **RAPID RESPONSE** – 15 second detection; 60 second identification
- **REPROGRAMMABILITY** – PC controller for simple software updates and higher level data interpretation
- **VERSATILITY** – capability against most gaseous/volatile chemicals listed in NIOSH 2010-168C (Pocket Guide to Chemical Hazards)



### Example deployments

- Industrial hygiene
- In-plant air monitoring
- Distributed pipe network
- Leak detection
- Clean room monitoring
- Process monitoring
- Chemical storage tank integrity

### Broadband detection

- Corrosive acidic gases (e.g. SO<sub>2</sub>, HCN, HF, H<sub>2</sub>S)
- Corrosive basic gases / vapors (e.g. NH<sub>3</sub> & Amines)
- Halogens (e.g. F<sub>2</sub>, Cl<sub>2</sub>, PCl<sub>3</sub>, PF<sub>3</sub>)
- VOCs (e.g. ethylene oxide, acrolein, acrylonitrile, etc.)
- Halocarbons (e.g. vinyl chloride, CFC's, etc)

## CONTACT OWLSTONE

Our technical team is exceptionally well prepared to assist with your chemical detection requirements, whether commonplace or specific to your facility.

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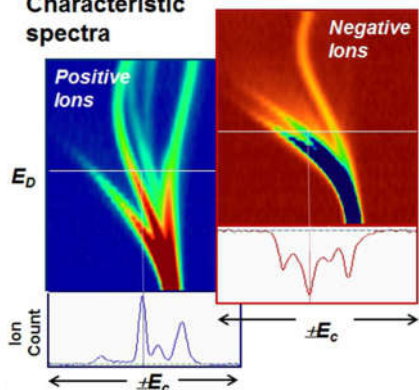
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## Characteristic spectra



## The Technology

OwlSens-T utilizes a highly advanced variant of Ion Mobility Spectrometry (IMS). This new method of ultra-fast chemical separation exploits the unique thermal properties of an ionized chemical sample, in a rapidly modulated high electric field. Every chemical has a unique spectral “finger-print”, which enables real-time identification and quantification from an on-board data base.

OwlSens-T technology delivers an analytical detection window greater than double that of other Ion Mobility based separation systems; allowing greatly improved chemical separation and identification. Multi-dimensional datasets are generated and automatically analyzed, on single-second timescales, resulting in faster, more accurate, low-false-alarm rate detection and quantification.

## Detection Specifications

- Response Time – 15 seconds
- Identification Time – 60 seconds
- Limits of Detection & Quantification – parts per billion to parts per million range (analyte dependant)
- No special support gas supplies or vacuum requirements
- Quick and easy single point calibration with handy confidence test device



## Meeting Your Needs for Chemical Detection

Monitoring airborne contamination in your buildings and other infrastructure is critical to maintaining the health and safety of your employees, checking ambient pollution levels, or ensuring the security of designated areas. In addition to detecting common Toxic Industrial Chemicals (TICs) at concentrations well below NIOSH's IDLH specifications, OwlSens-T can be customized through software to detect specific chemicals that matter to you. Talk to us today to discuss your specific detection requirements.

## TECHNICAL SPECIFICATION

Technology	Rapid Thermal Modulation Ion Spectrometry
Ionization Source	Patented non-radioactive source
Dimensions	12 × 18 × 8" = 30 × 46 × 20 cm
Weight	15.8 lbs = 7.2 kg
Mounting	Wall mount (bracket included)
Housing	Rust-resistant stainless steel
Ambient Temperature	0 to 40°C
Operating Humidity	0 to 95% RH (non-condensing)
Scrubber life	3 months
Power Requirements	13A, 120-240V AC, 50/60Hz
Comms interface	TCP/IP (Ethernet)
Dry contacts relay	3A, 240V AC (50-60Hz) / 48V DC
Electrical compliance	EN61010/UL61010, EN61326 + EN61000

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