eNose® QA

Contamination Detection System (CDS – 400)

The **eNose® QA** is a rugged, handheld detection system for chemical vapor contaminants in bottled water containers and food and beverage containers. It is also used for detection of chemical leaks (refrigerants, fuels) and in other applications. **eNose® QA** can be used throughout a facility to check multiple processes.

The sensor mechanism consists of a **NoseChip™** nanocomposite sensor array and associated software capable of making a determination of clean versus contaminated samples or leaks in ~3 seconds after pulling the trigger. The system provides ready, alarm, and self-test status via visual indicators (LED, LCD) and audible alarms.

The **eNose® QA** is ready to sample on an 8 second measurement cycle. This provides a capability to process hundreds of samples per hour. It can also be used by delivery personnel to inspect and reject dirty bottles prior at pick up prior to return to bottling plants for recycling and reuse.

Features and Benefits

- Point-of-use detector for chemical vapor contaminants and leaks
- Semi-automatic on-board initialization
- On-board self-test and diagnostics with real-time status report
- Intuitive interface with simple status indicators
- Operates in a wide range of ambient environments
- Portability provides operation throughout a facility.

eNose® QA

Sensigent
Intelligent Sensing Solutions

Detection Specifications

Sensor Technology | **NoseChip™** Nanocomposite Sensor Array

Contaminants Detected
(examples only)

   Alarm limits are below
   operational requirements

   Detection limits are
   much lower

Petroleum products	**Cleaning products**
Gasoline	Household cleaners
Diesel	Laundry products
Kerosene	Bleach
Paint Thinner	Industrial cleaners, degreasers
Chemicals	**Lubricants, oils**
Ammonia, Urea	Motor oil; new, used/burned
Solvents	Industrial lubricants
Alcohols	**Beverages**
Aromatics	Wine, beer
Naphthalene	Distilled spirits
Flavor additives	Soda, juices

Response Time	< 3 seconds
Detection Recovery Time	< 5 seconds
Sample Rate	> 300 per hour
Sensor Calibration	Automatic onboard calibration (< 90 sec) initiated by user
Sensor Life	> 500,000 measurements

Physical Characteristics

Alarm	3 tri-color LEDs with color-matched alarm indicator
Weight	< 3 lbs with batteries
Style	Pistol-grip handheld; rugged, sealed (IP65) case
Sample measurement	Internal air sampling pump; trigger activated
Vapor Sample Inlet/Outlet	Inlet at sensing tip, protected by replaceable inlet filter; outlet vented through handle

Operational Specifications

Temperature (operation)	14°F to +104°F / -10°C to +40°C
Temperature (storage)	-4 °F to +158°F / -20°C to +70°C
Relative Humidity	0% to 95% RH, non-condensing
Ruggedness	Splash proof; withstands drops, shocks
Warm-up Time	90 seconds
Ambient air supply	Disposable internal air filters; 60,000 measurements
Rechargeable Battery	6 NiMH C cells; 8 hrs operation per charge
Communication	Serial data cable
Data Logging	Available with **PCnose™** software option
Run-time Diagnostics	Available with **PCnose™** software option

Additional Features

User Manual
Carrying case and shoulder strap
Serial cable
PCnose monitoring software
Internal desiccant filter
External air inlet filter
Batteries
Offline battery charger

   Note: All specification values are typical and
   subject to change without notice.