

# **Continuous Ultra-Trace Mercury Vapor Analysis**

- Rugged Platform with Proven Accuracy & Stability
- o Free Lifetime Technical & Analytical Support
- Low Maintenance & Easily Serviceable
- User Control for Custom Applications
- Upgradable to a Fully Integrated, Automated Speciation System





Low detection limit < 0.1 ng/m<sup>3</sup>

# Tekran® Sets the Scientific Standard for

# Precision Mercury Vapor Analysis



The Tekran® Model 2537 has a proven record of continuous, unattended operation, even in some of the most remote and harshest locations on Earth.

The Tekran® Model 2537 performs continuous measurement of total gaseous mercury with unmatched accuracy, precision, and reliability. The atomic fluorescence based system is easy to set up, use and maintain. Model 2537 is the analyzer of choice, since it has been the primary apparatus used to advance the science of ultra-trace atmospheric mercury.

#### **Continuous Background Monitoring**

The Model 2537 has been used to monitor background and urban mercury levels at hundreds of sites around the world. The Model 2537's ability to operate continuously and to self-calibrate allows it to function unattended. It is the instrument of choice for networks in Canada (CAMNet), USA (NADP-AMnet) and the EU (EMEP-Level 3). Model 2537s have been in continuous operation at Alert, Canada and Mace Head, Ireland for over 14 years and are frequently reported in the scientific literature.

## Rugged, Compact & Versatile

The Tekran® 2537 is self-contained, compact, rugged and versatile. It's the only automated analyzer capable of precise and accurate mercury determination in ambient air at levels less than 1 ng/m³, with 5-minute resolution and no data gaps. With its unique features, the Tekran® Model 2537 has opened up a vast range of measurement applications that were once impractical or simply not possible.

### Mercury Speciation At Parts Per Quadrillion

Measuring atmospheric mercury speciation is necessary to unravel mercury impacts to sensitive ecosystems. The Tekran® 2537 is the only mercury vapor analyzer upgradable to a fully integrated, automated, continuous mercury speciation system. The patented Tekran® Model 1130 and Model 1135 combined with the Model 2537 detector provides the ability to monitor gaseous oxidized mercury and particulate-bound mercury species as low at 2 picograms/m³ (0.2 parts per quadrillion, v/v).

## Simple To Maintain

When you're measuring in a remote location, reliability is of prime importance. Downtime and service calls are not an option, so Tekran® products are designed to be easily serviceable by the field technician.

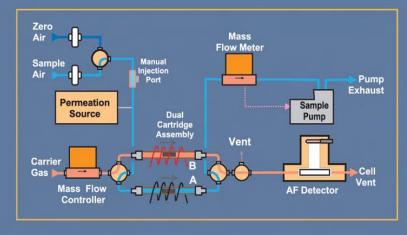




# Unparalleled Sensitivity, Performance, and Stability



#### **Specifications & Features:**



- Detector: Atomic fluorescence, temperature control, optical lamp feedback, high sensitivity PMT
- Sensitivity: < 0.1 ng/m³ (5min samples)</li>
- Calibration: Automated w/internal perm source
- Sampling: Continuous (no gaps in data stream) using patented, pure gold, dual cartridges
- Sampling Cycle: 2.5 60 min
- Sample Flow Rate: 0.5 1.5 liter/min with Precision Mass Flowmeter (MFM) control
- Pump: Internal, variable speed (MFM controlled)
- Outputs: Serial RS-232, Two 0-5 V analog
- Carrier Gas: Argon (UHP: Grade 4.8)
- Ar Use: < 6 liter/day (2 months per full-size tank)
- Ar Flow Rate: Precision Mass Flow Controller (MFC)
- Physical: 19" rack mountable (8.75" height)

# Want to know more about the most sought after mercury vapor analyzer and the only one capable of automated ultra-trace speciation?

The included CD has complete product information for the following:

- Series 2537 Mercury Vapor Analyzer
- Series 1130 and 1135 Speciation Modules
- DataCom Software Description
- System Accessories:
   1100, 1102, 1110, 1115, 1120, and 2505
- o Photos

### Free Lifetime Technical & Application Support

Tekran® system owners enjoy free lifetime technical and application support by a team of scientists and engineers with a combined 60+ years of focused mercury analysis and research.

# Add Automated Hg Speciation to your 2537 Analyzer





## Tekran® 1130 Mercury Speciation Analyzer

- Integrates seamlessly with the Tekran® 2537 Analyzer
- . Only automated Hg speciation system on the market
- Allows determination of gaseous oxidized Hg and Hg<sup>o</sup> species
- Separate controller allows sensitive components to be indoors
- Patented collection and desorption technology
- Adsorbing surface is regenerated with each desorption cycle
- Data logging option captures flows and temperatures
- Rugged design with proven performance in harsh environments

## Tekran® 1135 Particulate Mercury Analyzer

- . Connects directly to top of 1130 no additional mounting is required
- Automated determination of particulate-bound Hg, gaseous oxidized Hg and Hg<sup>o</sup> species
- Particulate filter regenerated with each desorption cycle
- Instrument of choice for monitoring networks in USA, Canada, and the EU

Top: 1130/1135 Controller Module
Middle: 1135 Particulate Module
Bottom: 1130 Denuder Module

Tekran® equipment is manufactured under several U.S., Canadian and international patents and patents pending



**Authorized Representative:** 

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