

# Tekran Model 2537Xi-NG

Rev. 040522



### **Key Features**

- Complies fully with ASTM-6350 and ISO-6978
- Unique dual-bed gold-quartz trap and pure gold analytical cartridge
- Analytical cartridge never exposed to sample gas for clean operation
- Multiple automated QA routines validate method performance
- Range 1 *ng*/m<sup>3</sup> to 2000 *ug*/m<sup>3</sup>
- Network enabled for remote operation

#### Electronics Platform and Detector Features

- Touch screen interface
- Local data storage and front panel USB port for data retrieval
- Additional functionality via optional s/w plugins (i.e. valve multiplexer)
- New lamp stabilizer and detector electronics w/ digital PMT control and display
- Easy cuvette removal via convenient fitting interface

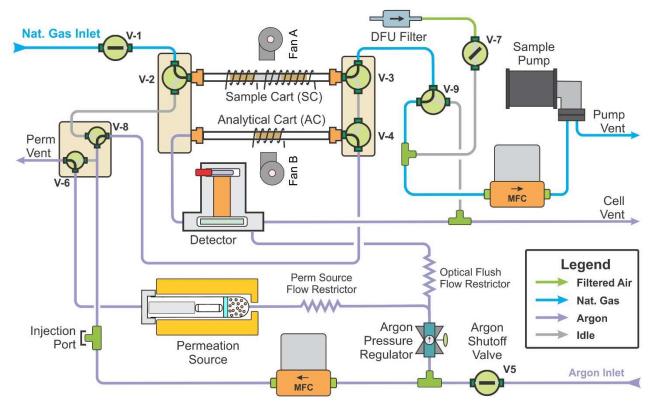
#### Flow Path - Calibration - Quality Assurance Features

- Valve assemblies with low dead-volume and inert PEEK surfaces
- Integrated sample and breakthrough trap assessment with option for single or combined heat provides options for measurement and QA assessment
- Constant power heater control insures consistent temperature over heater life
- Unique design isolates analytical trap from complex natural gas matrix; the trap is only exposed to carrier gas for improve accuracy, precision and robustness
- Integrated permeation source allows assessment of trapping efficiency, matrix effects, and routine automated calibration.

# Physical Layout

- Instrument case design allows free air exchange throughout instrument to improve overall safety rating
- Improved component accessibility for routine maintenance





# **Specifications**

Analyte: Total gaseous mercury in natural gas

Principle: Dual-bed gold pre-concentration with CVAFS detection.

Range:  $1.0 \text{ ng/m}^3 \text{ to } 2000 \text{ ug/m}^3$ 

Sampling Cycle: 2.0 – 60 min

Sampling: Alternating sample collection and analysis cycles

Data Outputs: Network (1), USB Device (1), USB Host (2), RS-485 (2),

RS-232 (1), Analog Chart (2)

Sample Flow: 0.1 - 0.5 L/min with 5 psi (max) inlet pressure

Flow Totalization: Precision mass flow controller (MFC)

Pump: Internal, variable speed (MFC feedback loop control)

Carrier Gas: Argon or Nitrogen

Consumption: ~125 L/day (full size tank lasts 2 to 3 months)

Carrier Setpoint: Precision mass flow controller. Carrier flow is set to one of 3

settings during each desorption cycle. MFC provides superior

stability and accuracy.

Calibration: Automatic **multi-point** calibration using internal permeation source.

Manual injection port also provided

Physical: Self-contained with maximum internal and external case venting.

19" rack mountable (4U height)