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## Appendix K Mercury Emissions Sampler Sorbent Trap Monitoring of Flue Gas Mercury

The Environmental Supply Company HG-324K system is designed for sampling mercury emissions from coal-fired sources as specified in Appendix K of Part 75. The HG-324K is controlled using an industrial data acquisition and control system with removable CompactFlash™ memory card for storing data files. The HG-324K may be connected to a plant network through wi-fi or direct connection to allow program control and remote data access. Per Appendix K, dual independent flow channels are included with proportional flow control based on the CEM flow monitor or an installed pitot. The complete system includes a dual heated probe assembly, heated sample line, dual condenser system and connecting umbilical.



### Product Features



Proportional flow control, based on CEM flow monitor or installed pitot, or constant flow control



Connect to plant network for remote control and data access



Automated data logging



Removable CompactFlash™ memory card stores data files



Wi-Fi router installed for remote control and data access



Continuous PID flow control maintains proportional sampling per appendix K

# Product Specifications

Rugged watertight and corrosion proof enclosure with 2" hard rubber transport wheels and retractable extension handle

Dual front panel flowmeters (0-1 lpm) for visual flow indication

Dual front panel vacuum gauges (0-30 in. Hg)

Dual low flow dry gas meters with digital counters for real time volume measurement

Dual zone temperature controller for probe heat

Rugged industrial automated controller includes 8-16 bit analog inputs, 8 analog outputs (0-10VDC), 8-16 bit thermocouple inputs, 8 counter inputs

Quick-turn Amphenol connectors for probe power, thermocouple input and external flow signal input

1/4" SS Quick Connectors for sample inlet and pitot dP Removable CompactFlash™ memory card for quick access to data files

Removable cartridge type acid gas sorbent protects installed equipment

Wi-Fi router installed for remote control and data access

Connect to plant network for remote control and data access

Program can maintain constant flow or constant proportion to stack flow per Appendix K of Part 75

Proportional flow control by external 4-20 mA signal from CEM flow monitor or dP from installed pitot

Program averages and records all data at user specified intervals

Program may pause sampling at user defined temperature conditions

## Other Components

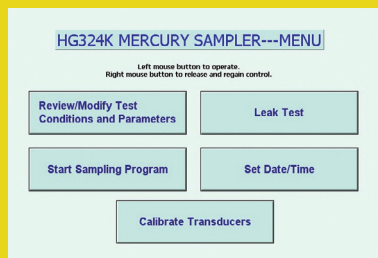
Dual channel probes with uniformly heated zone for sorbent tubes and heated internal sample lines

Hastelloy™ probes with compression ferrules for long term sampling

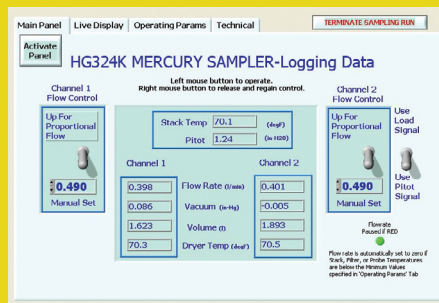
Heated lines in various lengths with two 1/4" Teflon sample lines

Thermoelectric condensers along with knockout impingers and silica gel impingers

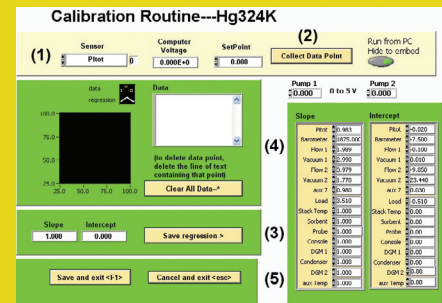
## Live Screenshots



The initial page offers quick navigation to the main 5 programs of the sampler.



Logging data is simple with our visual interface allowing up-to-the-second calculations.



This programmed time saving tool streamlines the transducer calibration process.



**Manual Dual Mercury Emissions Monitoring System** suitable for RATAs is available with independent dual channels, dry gas meters digitized with optical encoders, digital readouts for temperature and dry gas meter volumes, coarse and fine flow control valves, dual vacuum gauges and the same rugged weatherproof enclosure as the automated system.



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