

Model 5500 Fixed Gas Analyzer

Both synthetic and natural polymeric materials (such as biomass and tobacco) produce fixed gases, in addition to the larger molecules better suited to capillary GC analysis. Products such as CO, CO₂, water, methane, ethylene, among others, may be produced when a polymer is pyrolyzed. But, the resolution of the capillary GC and the simplicity of the mass spectra may not provide the certainty desired in identifying these compounds, which are potentially useful in calculating BTU values and mass balance.



To assist in analyzing for these fixed gases, CDS has designed a unique add-on feature for our popular [trapping pyrolyzer](#) systems which addresses this need. By adding a small chromatographic column and thermal conductivity detector to the outlet of the analytical trap, users will be capable of analyzing for the fixed gases that are normally purged from the system before analyzing pyrolyzates from a sample. The pre-packaged analyzer is a true “Plug & Play” option that is easily added to both new and existing systems. This user friendly system contains a Carboxen 1000 column, reference column and thermal conductivity detector. A software package for the chromatography and A/D conversion is included. The software will be supplied pre-programmed to analyze for fixed gases however, users can easily change programming for other applications.

Product Specifications

- **Detector Type:** Two cell hotwire with switchable polarity
- **Column Heat Rate:** Programmable up to 200°C/min
- **Column Dimensions:** 1/8" x 9'
- **Column Packing:** 60/80 mesh Carboxen 1000
- **Valve Oven/TCD Heating:** Up to 300°C
- **User Interface:** Backlit LED; Touch Screen
- **Flow Rate:** 0 to 100 ml/min

Includes Gas Injection Port, A/D Converter and Chromatography Software