The petrochemical, gas processing, & gas pipeline industry has for many years required an accurate, dependable, low maintenance, and cost effective sulfur analyzer for quality and process control purposes. With over twenty years of experience in developing and manufacturing sulfur analyzers and associated parts and supplies, Analytical Systems International has met these requirements with a unique & proven microprocessor based analyzer, which provides continuous on-line analysis based on the only absolutely specific lead acetate principal of operation. The Model 1600 system measures total sulfur by hydrogenation, similar to that as described in ASTM Method D3031, D4084-82, D4468-85, & 4045-81. The sulfur sample is precisely metered into a continuous flowing stream of hydrogen gas. The sample and hydrogen are heated in the furnace up to 1,315 degrees C resulting in thermal cracking of the sulfur which are reduced to short chain hydrocarbons. These reactions result in the formation of H\textsubscript{2}S. After complete humidification of the sample the H\textsubscript{2}S comes in direct contact with the lead acetate tape which produces a darkening of lead sulfide immediately measured by the photodiode/LED optics & rate-of-reaction digital electronics to provide an accurate and reproducible total sulfur analysis with PPB or PPM sensitivity up to 100%. The LCD display provides the current reading, any alarm condition, procedure prompts (such as calibration procedure), and failure indicators (local and remote capability). Quality materials are selected for their compatibility and are utilized throughout fabrication. Special attention is given to wetted parts that come in contact with the process stream and are selected to be non reactive with H\textsubscript{2}S.
SERIES 1600 SPECIFICATIONS

POWER INPUT - CUSTOMER SPECIFIED
110/240 VAC  50/60 Hz

TEMPERATURE
5 C to 50 C (operating)
-0 C to 70 C (storage)

PERFORMANCE
Range: Customer Specified
ppb thru ppm Up to Sulfur
Resolution: 1 ppb
Accuracy:  ±2% of Full Scale
Repeatability: ±1% of Full Scale
Linearity:  ±1% of Full Scale
Drift: Less than 1% of FS
Temp. Coefficient: .01% / C
Analysis Time: Less Than 1 Second
Interference: None

DISPLAY
Alpha Numeric LCD
Pixel Graphics 128x64

ANALOG
4 - 20ma Isolated (optional)
4-20ma (standard)

ALARM OPTIONS
Solid State 30ma 24V
Mechanical Relay 5a 220V
Normally Opened / Normally Closed
Diagnostic & Concentration

DIMENSIONS & WEIGHT
30"X50"X12" or 76cmX127cmX30cm
100 lbs. or 90 kg appx.

ACCESSORY OPTIONS
Automatic Calibration
Sample Probe and Regulator
Fugitive Emissions Control
Chart Recorder
Heater & Thermostat
RS-232/485
Modem Communications

Quotation Information:
Analytical Systems International provides design and application engineering assistance for the User’s analyzer requirements. For a quotation, please complete ASI Analyzer Quote Request Form at www.ASIKECO.com