The petrochemical, gas processing, and gas pipeline industry has required an accurate, dependable, low maintenance, and cost-effective sulfur analyzer for quality and process control purposes. With over twenty-five years of experience in developing and manufacturing sulfur analyzers and associated parts and supplies, Analytical Systems International Keco (ASI) has met these requirements with their proven microprocessor based analyzer. The Model 1700-150 System measures total sulfur and H₂S by hydrogenation similar to that as described in ASTM Method D3031, D4084-82, D4468-85 and 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°C resulting in thermal cracking of the sulfur that are reduced to short chain hydrocarbons. These reactions result in the formation of H₂S. After complete humidification of the sample, the H₂S comes in direct contact with the lead acetate tape and produces a darkening of lead sulfide that is immediately measured by the photodiode/LED optics and rate-of-reaction digital electronics to provide an accurate and reproducible total sulfur and H₂S analysis with PPB or PPM sensitivity up to 100%. The LCD display provides the current reading, any alarm condition, procedure prompts (i.e., calibration procedure), and failure indicators (local and remote capability). Quality materials are selected for their compatibility and utilized through fabrication. Special attention is given to wetted parts that come in contact with the process stream and are selected to be non-reactive with H₂S/sulfur.
SERIES 1700 TYPICAL 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 100% 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

**ALARMS** (Optional)
- Solid State 30 ma 24V
- Mechanical Relay 5a 220V
- Normally Opened / Normally Close
- Diagnostic & Concentration

**DISPLAY**
- Alpha Numeric LCD
- Pixel Graphics 128x64

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

**AREA CLASSIFICATION OPTIONS**
- Class I, Div II
- Class I, Div I
- General Purpose - Series 1600-150

**DIMENSIONS & WEIGHT**
- 30"H x 50"W x 12"D or 76cmH x 127cmW x 30cmD
- 200 lbs or 90 kg appx.

**ACCESSORY OPTIONS**
- Automatic Calibration
- Sample Probe and Regulator
- Fugitive Emissions Control
- Chart Recorder
- Heater & Thermostat
- Sampling Systems
- 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](http://www.asikeco.com)

Analytical Systems reserves the right to make revisions and or changes without notice. Analytical Systems shall not be liable for any errors or omissions made or any damages resulting from the use of the analyzer, information, or the manual. 03095 ©1995 Printed in the United States of America.