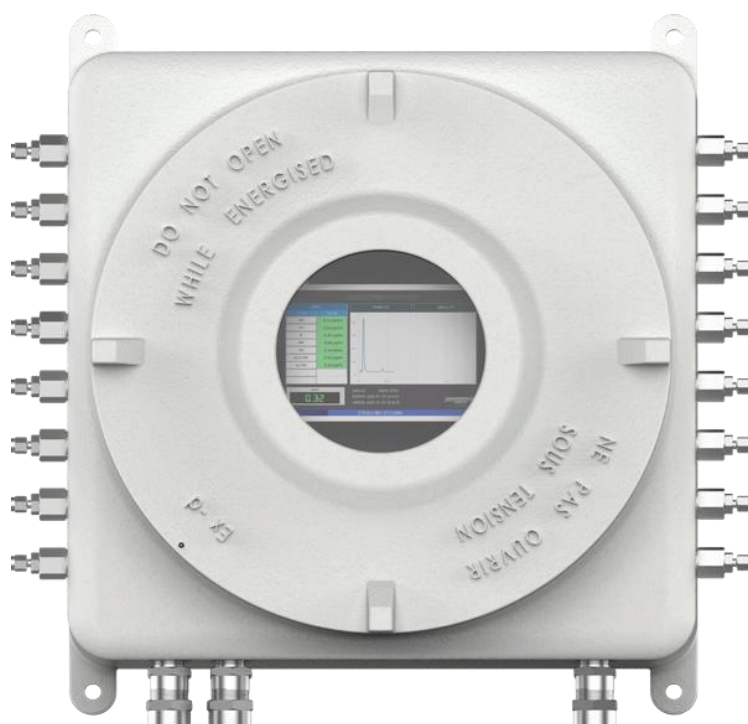




EIE

Chromatography Analyzer-Determination of Sulfides
EIE-DS-01

Chromatography Analyzer-Determination of Sulfides



- Physical safety; explosion-proof system Exd IIC T6 Gb, Zone 1 & 2
- Reliable UniLite Embedded Control System
- Multiple detectors: FID, TCD, miniature TCD, FPD, etc.
- Supports switching between no fewer than 16 samples

**EIE****Chromatography Analyzer-Determination of Sulfides
EIE-DS-01**

Introduction

Applications: Hydrogen sulfide in lean amine liquid of hydrocracking unit (titration), MDEA content (titration), mercaptans in catalytic gasoline feedstock and blended products of gasoline hydrogenation workshop; mercaptans in liquefied petroleum gas products of wax oil catalytic cracking workshop (potentiometric titration), total sulfur in liquefied petroleum gas products of wax oil catalytic cracking workshop.

Sampling temperature (°C): (design temperature °C);

Sampling pressure (MPa): (design pressure MPa);

Output signals: n channels of 4–20 mA DC, 1 contact alarm channel; Communication interface: RS485 to DCS.

Report Content

No.	Component Name
1	Methyl mercaptan
2	Ethanethiol
3	Propanethiol
4	Butanethiol
5	Total Sulfur

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Technical Features

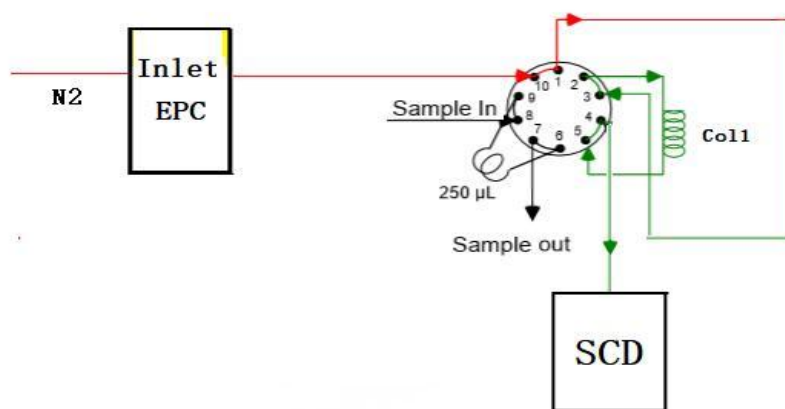
Analysis Procedure:

ASTM D5504 Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence.

Analysis Principle:

The sample is introduced into the chromatographic column via the injection valve. By switching the valves, hydrogen sulfide, methyl mercaptan, ethyl mercaptan, propyl mercaptan, butyl mercaptan, methyl sulfide, ethyl sulfide, dimethyl disulfide, and other components are separated; heavy sulfur compounds are back-blown out, and quantification is performed using the external standard method.

Detection Schematic Diagram



**EIE**

Chromatography Analyzer-Determination of Sulfides EIE-DS-01

Basic mechanical and electrical parameters

Enclosure	flameproof enclosure
Height and Depth	500mm × 500mm, depth 350 mm
Weight	50KG
Certifications	ATEXIICT6,ZONE1,2
Power Input	100–240 VAC, 50–60 Hz, maximum power of 300 W
Communication Mode	RS485,Ethernetx1,
Screen Size	standard configuration
4- 20 mA Output	Support (optional)
MODBUS	Support (Standard)
I/O Output	Instrument status, alarms, hardware errors, maintenance (all I/Os are configurable)

General Parameters for Chromatographs

Chromatographic Column Type	Filling Column & Capillary Column
Heating method for the chromatographic column	constant temperature
Valve Type	Switching valve/membrane valve, operating temperature range 0–225°C
Airway Control Method	Full pneumatic EPC control system
Detector Type	TCD
Keypad	configurable explosion-proof keyboard
Instrument Reverse Control Software	Equipped with built-in UniLite® system control software, it automatically performs sampling, analysis runs, and periodic calibration/system response measurements.
Communication Port Configuration Software	Modbus or other industrial standard protocols
Analog Output	Supports no fewer than 32 channels
Multiple-sample testing	Supports cyclic sampling at over 16 sampling points (optional)
control software	UniLite Industrial Edition
detector guard	TCD: Automatic monitoring of carrier gas