

SPECTRO 682P-EC™

On-Line Low-Level Sulfur Analyzer

The SPECTRO 682P-EC (low sulfur) analyzer is designed to continuously monitor total sulfur in liquid hydrocarbon streams. The sample is introduced to a thermal oxidizer and the resulting gas stream is presented to an electrochemical detector to measure the sulfur dioxide (SO₂) content. This method follows the procedure described in ASTM standard D 6428 .

With an overall range of 0-500 PPM, the 682P-EC can easily handle the new lower sulfur content regulations that will be implemented over the next few years globally.

Communication and Remote Diagnostics

The 682P-EC is controlled by an integral PLC and is complete with display and keypad. All important instrument parameters such as gas flow rates, pressures, furnace, sample conditioner and enclosure temperatures, and gaseous sample RH, are continuously monitored by the PLC to make available a comprehensive set of diagnostics and status signals.



Features and Benefits

- **Immune to nitrogen effects**
- Remote diagnosis, calibration verification and alarming with optional remote GUI.
- Bi-directional communications of all major parameters through optional remote GUI.
- Can be interfaced to any DCS or PLC system using standard Siemens interfaces.
- Conforms to all industry standards
- Simple to operate
- Available with custom sample conditioning and recovery systems
- User selectable ranges in the region of 0-500 PPM



Specifications

Instrument/Enclosure

Size: 76.9"H x 36" W x 16.8"D
(195 cm H, 91.5 cm W, 43 cm D)

Weight: Approximately 250 lbs.

Mounting: Floor or surface

Power: 220 - 240 VAC, 1P, 8A

Certifications: Class I, Div I, CENELEC,
CSA, ATEX ready

Display: PLC, LCD

Interface: DCS, PLC, PC

Detection Limits: < 1 ppm

Enclosure: NEMA 4X, IP66

Sample Size: 20 microliters, typical

Process

Stream Pressure: Inlet 15 psig (1 Bar)
Outlet 3 psig (0.2 Bar)

Process

Stream Flow: 40 sccm, nominal

Process Stream

Temperature: 35 - 90°C

Measurement

Technique: Electrochemical

Leak Detection: Combustible gas sensor
(Gasoline Applications Only)

Key Board: Membrane, touch pad

Analysis Time: 300 seconds

Ambient

Temperature Limits: 15 to 25°C

Gas Supply Specification

Enclosure Purge: Instrument Air, 12 SCFM (Initial Purge); 1 SCFM (Continuous Purge);
(nitrogen purge optional)

Valves: Instrument air, 80 psig (5.4 Bar)

Pyrolysis: Oxygen (99.75%), 450 sccm

Inlet: Oxygen (99.75%), 30 sccm

Dryer Purge: Argon (zero grade), 400 sccm

Inlet: Argon (zero grade), 150 sccm

U.S.A

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