





UV Fluorescence Sulfur Dioxide Analyzer

PROCESS & EMISSIONS MONITORING SYSTEMS

Eco-designed, ultra-compact, smart & connected continuous SO₂ analyzer, specifically designed for emission or process gas monitoring.







Cold Dry Extractive sampling (Dry Basis Analysis)







SPECIFIC FEATURES:

- Superior metrological performances for SO₂ measurements in the range 0-100/1000 mg/m³
- Extractive analyzer, perfectly suitable for Flue-gas desulfurization (FGD) applications
- Compatible with any type of drying technology: gas cooler, permeation dryer, etc.
- Real-time calibration graph, animated synoptic, auto-diagnostic, control and maintenance data screens can be displayed while the instrument is operating
- Interference free and fast measurement
- Interactive menu-driven software allowing ease of operation
- Highly accurate, excellent stability
- Proactive, user-friendly remote communication
- Economical, easy and reduced maintenance
- Ultra low power consumption: an environmentally-friendly and cost-saving analyzer
- Smart analyzer including AMS control functionnalities: integrated sampling control, automatic zero and span gas injection, external pump control, system alarms display...
- Includes embedded Communication Protocol for WEX® Management Software with automatic recognition and configuration

MAIN APPLICATIONS:

- > SO₂ removal efficiency in processes using FGD
- > Municipal and Hazardous Waste Incinerators
- > Industrial Boilers and Furnaces
- > Power & Combustion
- > Cement Kilns, Chemical, Petrochemical Plants

COMPLIANCE WITH:

TÜV approved as suitable for use as exhaust measurement at industrial plants.





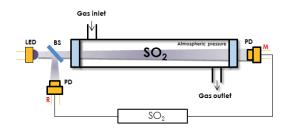
UV Fluorescent SO, analyzer MIR 9000ASD

PRINCIPLE OF OPERATION:

The MIR 9000ASD is a continuous SO₂ analyzer.

Its measurement principle is based on the Beer-Lambert law related to the direct absorption spectroscopy technique. The sample is aspirated by an internal pump through a Teflon tube (6 mm external diameter) connected to the rear panel of the analyzer.

Eco-designed, the gas monitor utilizes the most recent optical and electronic technologies offering superior connectivity, increased accuracy and robustness, while requiring only limited maintenance.



LED current feedback in real time



Continuous UV energy control



Real-time, animated diagram on display

TECHNICAL SPECIFICATIONS	
Measurement range	0-100 / 0-1000 / 0-4285 mg/m³ - 0-35 / 0-350 / 0-1500 ppm
Minimum detectable limit (2σ)	0.2 ppm (response time: 50 sec)
Noise (σ)	0.1 ppm (response time: 50 sec)
Zero drift	< 0.1 ppm / 7 days
Span drift	< 0.1 ppm / 7 days
Linearity	±1%
Response time (0-90 %)	20 - 90 sec (programmable)
Sample flow-rate	20-25 liter/hour
Display	TFT LCD color touch-screen, resolution: 800 (RGB) x 480, size: 7"
Communication	MODBUS/RTU, MODBUS/TCP, MODE4, UDP protocol
Output connectivity	Ethernet (RJ45), 3 x USB ports, 2 dry contacts outputs included
Output connectivity (option)	4 analog outputs (0-1 V, 0-10 V, 0-20 mA, 4-20 mA), RS232/RS485
Memory capacity	1 year based on 15-min intervals
Alarms management	Continuous detection and identification of anomalies: temperature flow rate, electric parameters, programmable threshold
Maintenance tests and diagnostics	Direct access through the touch screen, remotely, through the ENVEA Connect app or DAHS software
Operating temperature	+5 °C to +40 °C
Power supply	100~250Vac, 50/60Hz + ground
Energy consumption for 220 V (or option! 24 V power supply)	50 W (23 W/h with optional 24 V PS)
Zero/span external SV control	Contact connector with screw terminals
Pressure and temperature compensation	
Dimensions L x D x H (mm)	483x606x133 mm; 19" rack, 3U
Weight	9 kg (19.9 lbs)
	5 kg (15.5 lb3)

Complete systems would include:

- Sample extraction probe
- SEC® sampling system (permeation based) or gas cooler
- Sample lines
- Multiplexing system (MVS)

- Automatic calibration units
- Instrument air drying system (MDS)
- Rack cabinet, cubicle or shelter integration
- WEX[™] data acquisition, management & environmental reporting software (DAHS)





