



## UV Fluorescence Sulfur Dioxide Analyzer

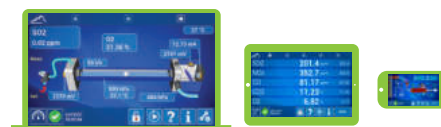
PROCESS & EMISSIONS MONITORING SYSTEMS

Eco-designed, ultra-compact, smart & connected continuous SO<sub>2</sub> analyzer, specifically designed for emission or process gas monitoring.



ENVEA Connect™  
Free Apps  
iOS / Android

**CD** Cold Dry Extractive sampling  
(Dry Basis Analysis)



### SPECIFIC FEATURES:

- Superior metrological performances for SO<sub>2</sub> measurements in the range 0-1500 ppm
- Extractive analyzer, perfectly suitable for flue-gas desulfurization applications FGD/DeSOx
- Compatible with any type of drying technology: gas cooler, permeation dryer, etc.
- Environmental-friendly and cost-saving analyzer, with ultra low power consumption
- Ultra-small and lightweight : 3U, 19" Rack
- Interactive menu-driven software allowing ease of operation
- Highly accurate, excellent stability, economical, easy and reduced maintenance
- Proactive, user-friendly remote communication
- Real-time calibration graph, animated synoptic, auto-diagnostic, control and maintenance data screens can be displayed while the instrument is operating
- Smart analyzer including AMS control functionalities: 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:

- > SO<sub>2</sub> removal efficiency in processes using FGD
- > DeSOx performance management
- > 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.



Tested AMS  
Regular  
Surveillance

www.tuv.com  
ID 0000051692



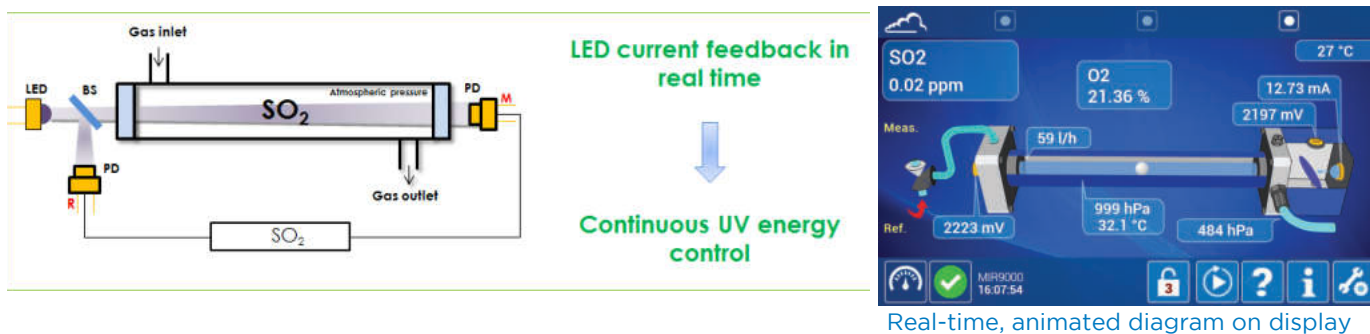
U.S. EPA COMPLIANT  
40 CFR 60 ET 75

# UV Fluorescent SO<sub>2</sub> analyzer **MIR 9000ASD**

## PRINCIPLE OF OPERATION:

The MIR 9000ASD is a continuous SO<sub>2</sub> 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.



## TECHNICAL SPECIFICATIONS

Measurement range	0-100 / 1000 mg/m <sup>3</sup> 0-100 / 0-1500 ppm
Minimum detectable limit (2σ)	0.2 ppm
Noise (σ)	0.1 ppm
Zero drift	< 1 ppm / 7 days
Span drift	< 1% / 7 days
Linearity	± 1 %
Response time (0-90 %)	5 - 40 sec (programmable)
Sample flow-rate	approx. 25 l/h
Display	TFT LCD color touch-screen, resolution: 800 (RGB) x 480, size: 7"
Communication	MODBUS/RTU, MODBUS/TCP, MODE4, UDP protocol
Input/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 measurement threshold
Maintenance tests and diagnostics	Direct access through the touch screen, remotely, through the ENVEA Connect™ app or DAHS software
Operating temperature	0 °C to +35 °C
Power supply	100-250Vac, 50/60Hz + ground or 24V
Energy consumption for 220 V (or optional 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	Automatic
Dimensions L x D x H (mm)	483x606x133 mm; 19" rack, 3U
Weight	9 kg (19.9 lbs)

### Complete systems would normally include:

- Sample extraction probe
- Sample conditioning system: SEC® box (permeation based) or gas cooler
- Sampling lines
- Automatic calibration units
- Multiplexing system (MVS)
- Rack cabinet, cubicle or shelter integration
- WEX™ data acquisition, management & environmental reporting software (DAHS)

