AF22e CTRS

UV Fluorescent Total Reduced Sulfur Analyzer

AIR QUALITY MONITORING SYSTEMS

SPECIFIC FEATURES:

- External module, to be used in combination with the AF22e SO_2 analyzer for the continuous measurement of TRS compounds or cyclic measurement SO_2/TRS
- Selectable and independent ranges, auto-ranging
- User programmable ranges and average time
- Temperature and pressure compensation
- Excellent metrological performances for all sulfur compounds: H_2S, CH_2SH, COS, CS_2, $(CH_2)_2S$, $(CH_2)_2S_2$...
- Innovative conception for excellent sensitivity and signal stability
- Includes embedded Communication Protocol for XR® Software with automatic recognition & configuration
- Ultra low power consumption: an environment-friendly and cost-saving analyzer
- Breakthrough mechanical design for weight and power saving as well as thermal insulation & reliability
- Automatic recognition of plugged electronic boards or optional devices: plug & play principle
- Local and remote control through digital port (configuration, calibration, test and diagnostic parameters for maintenance support)
- Real-time calibration graph, animated synoptic, auto-diagnostic, control and maintenance data screens can be displayed while the instrument is operating

MAIN APPLICATIONS:

› Leak detection and monitoring of fugitive emissions: quarries, storage facilities, mines, fertilizers plants
› Odor monitoring: WWTP, recycling, pulp and paper manufacturing, composting...
› Low level sulfur compounds monitoring in ambient air
› Environmental monitoring of clean rooms
› Indoor / workplaces monitoring

3 SELECTABLE MODES:

- continuous TRS measurement
- cyclic measurement SO_2 / TRS
- uninterrupted SO_2 measurement

The AF22e offers compliance with:

2008/50/EC, EN 14212 (2012), EN 15267, 40 CFR PART 53 SUB B and SUB C

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UV Fluorescent Total Reduced Sulfur Analyzer **AF22M-CTRS**

PRINCIPLE OF OPERATION:

The AF22e-CTRS consisits of 2 associated modules: the CTRS module (ref CTRS-S2e) plus SO_2 analyzer (ref AF22e)

TECHNICAL SPECIFICATIONS - AF22e	
Measurement range	0-1 ppm / 0-10 ppm (user selectable or auto-ranging)
Detection limit (2σ)	< 0.4 ppb
Noise	< 0.2 ppb
Zero drift	< 1 ppb / 24h
Span drift	< 0.5% / 24h
Response time	20 - 120 sec (programmable)
Linearity	1% (of Full Scale)
Sample flow-rate	20 L/h
Data storage	1 year
Communication	Ethernet network connection (RJ45), 3x USB ports, 2 dry contacts outputs included
Dimensions L x D x H (mm)	483 x 545 x 133
Chassis	19'' rack, 3U
Weight	9.8 kg (20.9 lbs)
Standard operating temperature	0°C to +35°C
Power supply	115 V, 60 Hz / 230 V, 50 Hz / 24 V optional
Power consumption	110 W/h (35 W/h with optional 24V PS)
Pressure and temperature compensation	
Internal solenoid valve block for zero air and span gas	
Internal sampling pump	
Built-in web-server for full remote emulation of the analyzer	

TECHNICAL SPECIFICATIONS - CTRS MODULE	
Measurement range	0.10 / 0.25 / 0.50 / 1 ppm
Minimum detectable	<0.001 ppm
Duration of cycle mode TRS/SO_2	2x225 seconds
Response time	TRS mode: 120 sec SO_2 / TRS mode: max. 7 min
Selective SO_2 filter capacity	500 ppm.h
TRS =>SO_2 converter T°	870° C
Output signal to the AF22e	Alarm temperature of the converter TRS => SO2
Power supply	230V – 50/60 Hz / 115V – 50/60 Hz
Dimensions (L x D x H)	483 x 545 x 133 mm
Weight	approx 8 Kg
Operating Temperature	+10°C to +35°C
Serial Communication	2 x RS 232 or 422

MAIN OPTIONS:

The operation of the analyzer AF22E with a TRS converter module requires the following options on the analyzer:

- rear panel equipped with 2 additional bulkhead unions,
- a linking cable
- sample IN/OUT connection to the AF22e through PTFE ∅ 4/2 mm tubing

AF22e analyzer (internal view)

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