## Dust measuring instrument STM 225

The compact solution for particulate matter measurement.







## Compact. Complete. Free from wear.

# The practical solution for measurements of particulate matter on solid-fuel systems

The increasing number of solid fuel systems such as systems fired with pellets or wood chips along with environmental considerations has brought about new and more stringent emission protection regulations. AFRISO provides chimney sweeps, heating system engineers, service technicians and other professionals with the right equipment to meet the new challenges involved in measuring the emissions of solid fuel systems.

The new AFRISO dust measuring instrument STM 225 was specially designed for mobile use on heating systems; it is approved for stages 1 and 2 as per German regulations, including limit value monitoring 150 mg/m³ for old systems. The compact, robust measuring system determines the dust concentration by means of a state-of-the-art optical scattered light method. This measuring principle provides for fast and accurate measuring results and also allows for real-time diagnostics – independent of external influences such as shocks and impacts. A great feature considering rough field service conditions.

#### **Description**

Robust, compact measuring system for mobile use, consisting of measuring instrument and sampling probe for the flue gas channel of the heating system. The AFRISO dust measuring instrument determines the particle/dust concentration using a state-of-theart optical measuring principle without consumables. The particle/dust concentration is then displayed as a mean value (duration: 15 minutes). Continuous measurements are also possible. The sampling probe can also be used for tightness tests of the entire gas path.



i

The European Renewables Directive 2009/28/EC requires EU member states to produce an increasing proportion of their energy consumption from renewable sources. As a result, the proportion of solid fuel systems such as systems fired with pellets or wood chips is on the rise – and so is the necessity to check the emissions of such systems for compliance with the respective emission protection regulations.

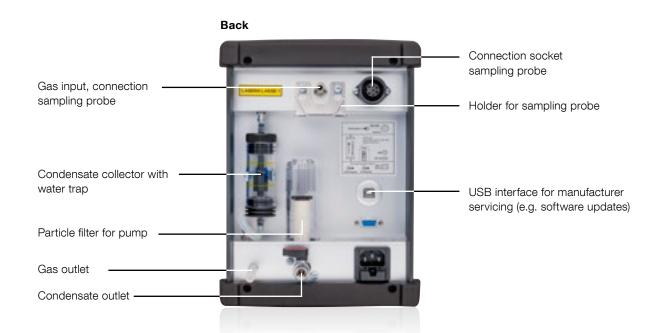
## **Technical specifications**

Measuring range	0/300 mg/m³ dust	
Measured values (via Multilyzer NG/STe)	O <sub>2</sub> : 0/21 % by volume CO <sub>H2</sub> : 0/4,000 ppm CO: 0/20,000 ppm	
Measuring resolution	0.1 mg/m <sup>3</sup>	
Operating temperature range	Ambient: 5/40 °C Storage: -20/+50 °C	
Housing (W x H x D)	190 x 275 x 330 mm	
Weight	Approx. 7.5 kg	

Degree of protection	IP 40
Display	Colour touch display, 5.7" (14.5 cm)
Supply voltage	AC 230 V, 50 Hz
Interfaces	USB, Bluetooth
Approvals	Certified suitability for stages 1 + 2, including 150 mg/m³
Transport bag	Light-weight heavy-duty with carrying strap and handle

## There are many reasons to opt for the best ...





## Dust measuring instrument-packages 2014



Dust measuring instrument

STM 225 without MULTILYZER NG

#### Scope of delivery:

- Dust measuring instrument STM 225
- Calibration report
- Zero point filter
- Mains plug
- Transport bag
- Infiltec fine filter (5 pieces)
- Teflon membrane (5 pieces)
- Sampling system with heated line, connection line and condensate filter cartridge KEP
- Cleaning kit consisting of 5 cleaning swabs, 5 cleaning cloths and 1 cleaning brush







Dust measuring instrument

STM 225 with MULTILYZER NG

## Scope of delivery STM like package 1 MULTILYZER NG including:

- With O<sub>2</sub>, CO<sub>H2</sub>, CO<sub>20,000</sub>, T gas, T air, draft, differential pressure and Bluetooth interface BTS-M
- Calibration report
- Power supply unit
- Protective sleeve for device with magnets
- Infiltec fine filter (5 pieces)
- Ambient air probe

Package 3



Dust measuring instrument **STM 225** with MULTILYZER STe

Scope of delivery STM like package 1

## MULTILYZER STe including:

- With O<sub>2</sub>, CO<sub>H2</sub>, CO<sub>20,000</sub>,
   T gas, T air, draft, differential pressure and Bluetooth Smart interface
- Eco sensor with extended service life and short calibration phase
- Calibration report
- Protective sleeve for device with magnets
- Power supply unit
- Infiltec fine filter (5 pieces)
- Ambient air probe







	Package 1	Package 2	Package 3
Dust measuring instrument STM 225	•	•	•
MULTILYZER NG		•	
MULTILYZER STe			•
Part no.	70200	802014	902014
Price	5,595.00	6,745.00	7,560.00
Monthly leasing rate (term 36 months)	172.89	208.42	239.00

## BESTELLSCHEIN Fax to +49 7135 102-209

#### My binding order:

Dust measuring instrument packages 2014	Part no.	Price	Number
Package 1: Dust measuring instrument STM 225 without MULTILYZER NG	70200	5,595.00	
Package 2: Dust measuring instrument STM 225 with MULTILYZER NG	802014	6,745.00	
Package 3: Dust measuring instrument STM 225 with MULTILYZER STe	902014	7,560.00	

Options/accessories		Part no.	Price	Number
Sampling probe, straight, 280 mm	Į.	70202	119.00	
Sampling probe, straight, 400 mm	for 25	70211	168.00	
Cleaning kit, consisting of 10 cleaning swabs, 10 cleaning cloths, 2 cleaning brushes	able M 2	70210	11.85	
Hand-operated ball pump with connection hose	Suitable for STM 225	511018	19.80	
Infiltec fine filter (price per piece € 4.75, PU 5 pieces) as pump filter		511003	23.70	
Base handle AWS-B for interchangeable probes with compensation line and draft connection, without KFP		500295	112.00	
Condensate filter cartridge KFP		500190	72.00	
Interchangeable probe AWS-S 300 mm	Φ	570074	64.00	
Interchangeable probe AWS-S 180 mm	STe	570073	82.00	
Annular gap probe AWS-R	for	570083	73.00	
Multi-hole probe AWS/M	ble	570080	78.00	
Flexible probe AWS-F 400 mm	uita LYZ	570079	131.00	
Combustion air probe TFB-VL100 M, with magnetic holder	Suitable MULTILYZER	500141	125.00	
Combustion air probe TFB-VL-1 200 mm	Z	500147	104.00	
Teflon membrane (10 pieces)		511004	15.60	
Thermal printer EUROprinter BLE, Bluetooth Smart and infrared interface		523525	329.00	
Thermal printer EUROprinter, infrared interface		522394	228.00	
		Total		

## Maintenance contract for MULTILYZER NG/STe

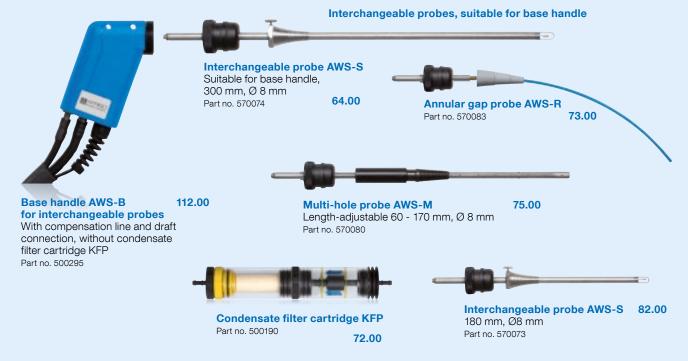
Annual service for reliable operation of your measuring instrument: Full function test, device calibration, inspection and, if necessary, replacement of the  $\mathrm{O}_{\!\scriptscriptstyle 2}$  and CO measuring cell. The basic maintenance contract can be extended to cover additional measuring cells.

#### Included:

- Test bench check / adjustment of gas temperature, air temperature, draft, differential pressure
- Software updates
- Basic cleaning of housing
- Cleaning of sensor block and pump
- Check of all seals and hose connections
- Check of PCB
- Cleaning and check of controls, connectors and probe elements
- Service and inspection certificate

☐ Please send m	ne a leasing	offer.
Company		
Department		
Name		
Post Code	City	
E-mail	·	
Street		
Telephone		Fax
Date	Signature	

### **Accessories MULTILYZER NG/STe:**



All prices in  $\ensuremath{\mathfrak{C}}$ , excluding applicable VAT. Subject to our Terms and Conditions.

