

BlueLine®

EUROLYZER® STx

Flue gas analyzer



Management
System
ISO 9001:2015
www.tuv.com
ID: 9105030470





EUROLYZER® STx - the flue gas analyzer for measurement of small and medium-sized oil, gas and pellet heating systems in accordance with the German Federal Immission Act and to verify the CO concentration in gas fired systems. Ideal for the maintenance of pellet heating systems with temporary CO peaks up to 9,999 ppm or bivalent, modulating combined heating and power plants.

The BlueLine® EUROLYZER® STx is a portable flue gas analyzer with a robust protective holster and integrated magnets. The large TFT color display allows you to display up to 8 values. The EUROLYZER® STx includes automatic control devices at startup and limit monitoring to protect the sensors. The compact design allows any combination of up to three measuring cells (O₂, CO, NO). The new ECO-sensor technology has a longer life, is resistant to biogenic fuels and also "lead-free" - an active contribution to environmental protection!

Calculated parameters: CO undiluted (air free), Lambda, CO_c, efficiency (Eta), flue gas loss (qA), dew point, temperature difference. The CO/H₂ measuring cell is H₂-compensated for official measurements. The optional data logger function allows long-term measurements in freely definable intervals. The data output is in XML format supports and is therefore universally usable.



There are a variety of data interfaces, such as USB, Bluetooth® Smart (BLE), infrared and microSDHC card for communication with other devices, PC or the EUROprinter available.

Alternatively, the measurement protocols can be converted to QR code and then scanned by smartphones and tablets. The protocols can also be passed to management software programs.

Funktionalität

Measurement of:

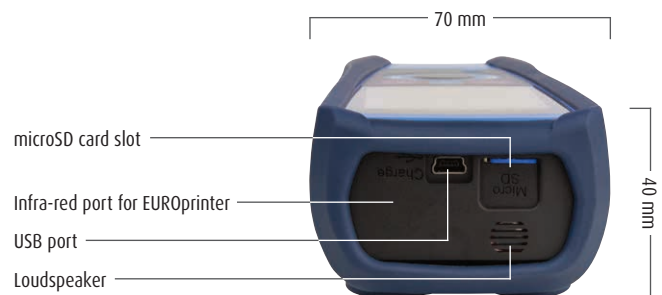
- O₂ (oxygen)
- CO/H₂ (carbon monoxide, H₂-compensated)
- NO (nitrogen oxide)
- Draft /Differential pressure
- T_{air} (ambient temperature)
- T_{gas} (flue gas temperature)
- Barometric pressure

Calculation of:

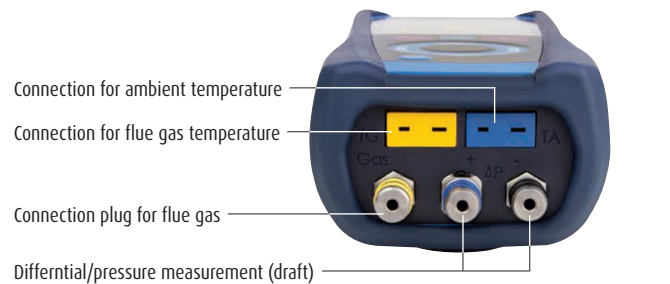
- CO₂ (carbon dioxide)
- CO undiluted
- Difference in temperature
- Combustion efficiency
- Lambda (excess air)
- Flue-gas losses
- CO_{ref} (O_{2ref} configured)
- Dewp. (dewpoint)
- NO_x (based on NO)

The drop-down menu with colored icons appears immediately after activating the EUROLYZER® STx. The touch wheel can be used to choose following programs: flue gas analysis, temperature measurement, CO ambient measurement, pressure measurement, Pitot measurement (option), instrument settings and memory. You confirm your selection with the enter key. When using the flue gas analysis function, you will first be asked to make a selection from a list of fuel types. Then the measured values will be displayed on the screen.

Compact ergonomic design



Top view



Bottom view

Clearly structured and field-proven display

The EUROLYZER® STx has a 2.8" TFT color display with a resolution of 240 x 320 pixels. The various measurement menus are each displayed in their own unique color, which simplifies navigation. The display's large viewing angle, clarity and backlight ensure that the data and measurement values displayed are clearly visible under all circumstance.

Easy to use

Due to the clever design, everything is put in a convenient and logical place (see above).

The BlueLine® EUROLYZER® STx is very compact and therefore easy to handle and transport. You can make the same high quality demands on the EUROLYZER® STx as on any other BlueLine® measuring instruments!

Technical specifications	
O₂ (oxygen)	
Measuring range	0 to 21 vol.-%
Accuracy	±0.2 vol.-% RDG
Resolution	0.1 vol.-%
Response delay (t90)	< 30 seconds
CO (carbon monoxide) with H₂-compensation	
Measuring range	0 to 4,000 ppm (max. 10,000)
Accuracy	±5 ppm (< 50 ppm) ±5 % RDG (> 50 ppm)
Resolution	1 ppm
Response delay (t90)	< 60 seconds
CO₂ (carbon dioxide) calculated	
Measuring range	0 to CO ₂ max.
Accuracy	±0.2 vol.-%
Resolution	0.1 vol.-%
Response delay (t90)	< 30 seconds
Flue gas temperature	
Measuring range	0 to 1,150 °C
Accuracy	±1 °C + 1 digit (< 300 °C) ±0.5 % RDG (> 300 °C)
Resolution	0.1 °C
Response delay (t90)	< 30 seconds
Ambient air temperature	
Measuring range	-20 to 200 °C
Accuracy	±3 °C + 1 digit (-20 to 0 °C) ±1 °C + 1 digit (0 to 200 °C)
Resolution	0.1 °C
Response delay (t90)	< 30 seconds
Barometric pressure	
Measuring range	500 to 1,150 hPa
Accuracy	±10 hPa
Resolution	1 hPa
Response delay (t90)	< 60 seconds

Options	
NO	
Measuring range	0 to 2,000 ppm
Accuracy	±5 ppm (< 50 ppm) ±5 % RDG (> 50 ppm)
Resolution	1 ppm
Response delay (t90)	< 60 seconds
Draft/differential pressure	
Measuring range	±70 hPa (draft) / ±150 hPa (diff. pressure)
Accuracy	±0.02 hPa (< 2 hPa) ±1 % RDG (> 2 hPa)
Resolution	0.01 hPa (< 20 hPa) 0.1 hPa (> 20 hPa)
Max. overload	1,350 hPa
Response delay (t90)	< 10 seconds
Pitot	
Measuring range	0.5 to 70 m/s
Accuracy	±0.8 m/s
Resolution	0.1 m/s
Response delay (t90)	< 20 seconds

Accessories

The EUROLYZER® STx has matching accessories for every job in the HVAC professional and chimney sweep everyday life. The high-quality carrying case has room for all this. For example, for a 300 mm exhaust gas probe with 2.40 m hose and condensate cartridge filter, protective cover with magnet, battery charger / power supply, temperature sensor for ambient air, manual (incl. copy of EN50379 certificate).



Performance

In addition to the usual gas-measurement functions, the compact all-rounder can accommodate up to three gas-measuring cell, one pressure and two temperature sensors and so it offers the possibility to check all heating systems on the market. The ECO-sensor technology ensures the fast response. The EUROLYZER® STx starts a test during commissioning to ensure correct functioning of the device. All sensors are activated, the status of the battery is displayed. If the calibration date is exceeded, a message is displayed. The EUROLYZER® STx is fitted with a condensate filter cartridge. This component is arranged in the hose line so that the user can clearly see when the water-trap needs to be emptied. A dust filter and a PTFE filter are also integrated in the condensate filter cartridge. The PTFE filter prevents that the condensate reaches the sensors.

EN50379 Part 1 and 2

The EN50379 is the European standard, in which the permissible measurement procedures are established for the measurement of combustion devices. The EUROLYZER® STx has certification EN50379 part 1 and 2 for measurements of O₂, CO/H₂, NO, temperature and differential pressure.

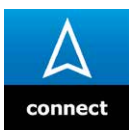
General specifications

Dimensions H x W x D	215 x 70 x 40 mm
Weight	between 500 and 650 g
Material housing	Plastic (PA)
Display type	2.8" TFT (240 x 320 pixels)
Air pressure range	750 to 1,100 hPa
Humidity range	20 to 80 % rh
Operating temperature	0 to 40 °C
Storage temperature	-20 to 50 °C
Data interface	Bluetooth® QR code generator microSD card Wireless IR connection with optional EUROprinter
Connection	Gas: 1x Ø 8 mm Pressure: 2x Ø 7 mm Temperature: 2x Thermocouple socket
Power supply	Mini USB mains unit (5 V)
Battery type	rechargeable li-ion battery 3.6 V / 2,900 mAh
Memory type	optional microSD card up to 16 GB
Ingress protection rating	IP42 (EN 60529)

Maximum flexibility in data documentation

The free EuroSoft® connect App allows to transmit measured values to smartphones, tablets or PCs via QR code or Bluetooth®.

All BlueLine® measuring instruments can be used together with this app for documentation and visualisation of "live" measurement results, logs and long-term measurements. Ideal for adjustment and documentation with the optional data logger function. Measurements can be shared in multiple ways (e.g.: cloud services, email, etc.). The evaluation software can be used on iOS, Android or Windows operating systems.



Optional accessoires

Modular probe system with interchangeable probes



Base handle for interchangeable probes



Base handle with hose and condensate filter cartridge



Interchangeable probe, 180 mm



Interchangeable probe, 300 mm



Flexible probe, 400 mm

PTFE-filter

The EUROLYZER STx's condensate cartridge contains a PTFE-filter, which functions as an additional safeguard against condensation.



Dust filter

The condensate cartridge also contains a dust filter that protects the flue gas analyzers against dust and soot particles.



Dust and other particles can impair the instruments if they reach the sensors. The dust filter should be replaced periodically to guarantee proper operation.



Thermal printer EUROprinter

Compact printer with four magnets at the back for hands-free operation. Infrared interface for easy connection of all BlueLine® series measuring instruments. Documents all measured results on paper for official purposes - anywhere.

Accessories included: batteries, 1 roll printer paper and user's manual



Printer paper for EUROprinter

5 rolls thermo printer paper





Quality since 1987

SYSTRONIK GmbH is specialized in development and production high quality measuring instruments for flue gas analysis, testing and maintaining HVAC installations, climate and environmental technology. All SYSTRONIK products satisfy the highest standards for quality, reliability and safety.

Our facilities are certified to full operational requirements of the ISO 9001 quality standard. We are constantly striving to improve our quality assurance position with input from periodic audits by independent experts required for continued certification.





Distributor:

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