



BlueLine®

# BLUELYZER® C1

Flue gas analyzer



CO: EN50379-3



Management System  
ISO 9001:2015

www.tuv.com  
ID: 9105030470



## Compact but tough

Small form, robust housing, maximum protection.

## High-resolution display

offers best readability and clearly structured menu navigation.

## All-Day power

20+ hours of runtime for uninterrupted use.

## Pressure precision

Reliable measurements for gas flow, differential pressure, and air flow



## Hands-free work

thanks to strong holding magnets or using the holding eyelet.

## Blazing speed

Powered by a fast processor for smooth, responsive performance.

## EuroSoft® connect



## CAPBs® compatible

Expandable with over 35 sensor units and sets from the CAPBs® system.

## Powerful functions for daily HVAC use

Modern heating systems demand precision for both optimal performance and operational reliability. To achieve maximum efficiency, accurate analysis of flue gas composition is essential. Monitoring CO<sub>2</sub>, CO, NO, and the resulting toxicity index ensures safe operation while helping to protect the environment.

The BLUELYZER® C1 is built for professionals who value accuracy, simplicity, and reliability. It delivers precise measurement and analysis for the adjustment, maintenance, and inspection of small to medium-sized heating systems.

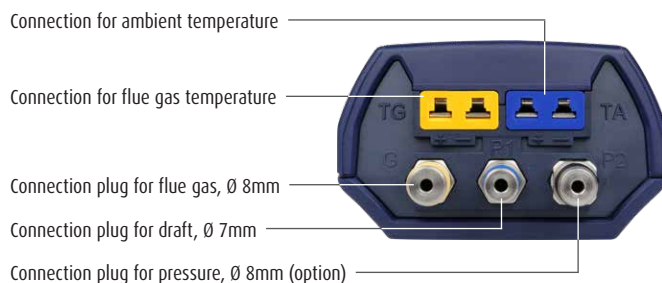
Beyond flue gas analysis, the BLUELYZER® C1 also measures differential pressures and temperatures, enabling quick determination of flow and return values. Integrated CO ambient monitoring adds an extra layer of safety with two freely adjustable alarm thresholds.

A convenient hold function allows measured values to be frozen on-screen while readings continue in the background - ideal for efficient documentation. Customizable measurement programs and parameters provide maximum flexibility in everyday workflows, making the instrument adaptable to each user's needs.

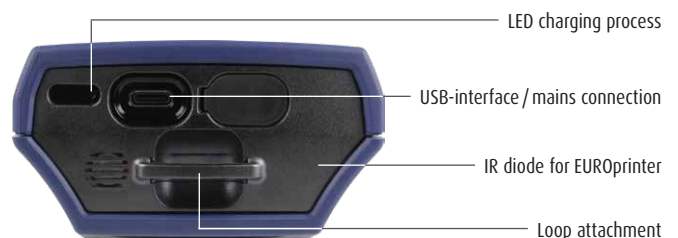


## Compact. Smart. Precise.

### Bottom view



### Top view



| Technical specifications                             |  |
|--|--|
| <b>O<sub>2</sub> (oxygen)</b>                        |  |
| Measuring range                                      | 0 to 21 vol.-%   |
| Accuracy   | ±0.2 vol.-% RDG  |
| Resolution   | 0.1 vol.-%   |
| Response delay (t90)                                 | < 30 seconds   |
| <b>CO (carbon monoxide)</b>                          |  |
| Measuring range                                      | 0 to 2,000 ppm (max. 6,000)                                  |
| Accuracy   | ±5 ppm (< 50 ppm)<br>±5 % RDG (> 50 ppm)                     |
| Resolution   | 1 ppm  |
| Response delay (t90)                                 | < 60 seconds   |
| <b>Draft / pressure</b>                              |  |
| Measuring range                                      | ±70 hPa (draft)<br>±150 hPa (pressure)                       |
| Accuracy   | ±0.02 hPa (< 2 hPa)<br>±1 % RDG (> 2 hPa)                    |
| Resolution   | 0.01 hPa (< 20 hPa)<br>0.1 hPa (> 20 hPa)                    |
| Max. overload  | 1,350 hPa  |
| Response delay (t90)                                 | < 10 seconds   |
| <b>Flue gas temperature</b>                          |  |
| Measuring range                                      | 0 to 1,150 °C  |
| Accuracy   | ±1 °C + 1 digit (< 300 °C)<br>±1 % RDG (> 300 °C)            |
| Resolution   | 0.1 °C   |
| Response delay (t90)                                 | < 30 seconds   |
| <b>Combustion air temperature</b>                    |  |
| Measuring range                                      | -20 to 200 °C  |
| Accuracy   | ±3 °C + 1 digit (-20 < 0 °C)<br>±1 °C + 1 digit (0 < 200 °C) |
| Resolution   | 0.1 °C   |
| Response delay (t90)                                 | < 30 seconds   |
| <b>Option: CO<sub>high</sub> (carbon monoxide)</b>   |  |
| Measuring range                                      | 0 to 2.0 vol.-%  |
| Accuracy   | ±10 ppm (< 200 ppm)<br>±5 % RDG (> 200 ppm)                  |
| Resolution   | 1 ppm  |
| Response delay (t90)                                 | < 60 seconds   |
| <b>Option: NO (nitrogen oxide)</b>                   |  |
| Measuring range                                      | 0 to 5,000 ppm   |
| Accuracy   | ±5 ppm (< 50 ppm)<br>±5 % RDG (> 50 ppm)                     |
| Resolution   | 1 ppm  |
| Response delay (t90)                                 | < 60 seconds   |
| <b>Option: NO<sub>low</sub> (nitrogen oxide low)</b> |  |
| Measuring range                                      | 0 to 300 ppm   |
| Accuracy   | ±2 ppm (< 40 ppm)<br>±10 % RDG (> 40 ppm)                    |
| Resolution   | 0.1 ppm  |
| Response delay (t90)                                 | < 60 seconds   |

| General specifications    |   |
|---------------------------|---|
| Dimensions H x W x D      | 178 x 78 x 45 mm  |
| Weight                    | approx. 370 g (depending on configuration)  |
| Material housing          | 2K ABS + PC / TPE   |
| Display type              | 3.5" color TFT  |
| 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®<br>QR code generator<br>USB-C<br>IR / Bluetooth® with optional EUROprinter                     |
| Connections               | Gas: 1x Ø 8 mm<br>Draft: 1x Ø 7 mm<br>Pressure: 1x Ø 8 mm (option)<br>Temperature: 2x thermocouple socket |
| Power supply              | via USB-C socket and adapter  |
| Battery type              | rechargeable lithium-ion battery 3.6 V / 4,800 mAh  |
| Operating time            | approx. 20 hours  |
| Memory type               | internal memory (up to 100 measurement reports)   |
| Ingress protection rating | IP40 (EN 60529)   |



## Technical highlights



- **3-sensor setup (O<sub>2</sub>, CO+, NO<sub>low</sub>)**  
versatile configuration for a wide range of applications
- **Differential pressure option**  
includes all standard pressure measurement features of BlueLine® instruments
- **Enhanced O<sub>2</sub> sensor**  
durable design with an expected lifetime of around three years
- **Gas path check (option)**  
automatic tightness test of the measuring system and probe for reliable operation
- **Consistent probe connection**  
fully compatible with existing BlueLine® accessories
- **Integrated memory function**  
stores up to 100 measurement logs locally in the instrument

## Smart connectivity and easy data management

The free EuroSoft® connect App makes it effortless to transfer measurement data to smartphones, tablets, or PCs via Bluetooth® or QR code. All BlueLine® instruments integrate seamlessly with the app, enabling convenient documentation, visualization of live readings, and long-term monitoring.

With the optional data logger function, measurements can be tracked and analyzed over time – perfect for system optimization and reporting. Results can be shared instantly through cloud services, email, or management software, and the app is fully compatible with iOS, Android, and Windows platforms.









**EuroSoft® connect app**
















## CAPBs® – Smart. Fast. Versatile.

Transform your instrument from a simple measuring tool into a versatile multifunctional instrument with the CAPBs® system. Easily pair your BlueLine® instruments with over 35 sensor units and sets from the proven CAPBs® range to perform almost any measurement task with precision and efficiency – including pressure, gas leak detection, temperature, and humidity. With wireless Bluetooth® connectivity, CAPBs® connect instantly to your measuring instruments or mobile devices, enabling a transition to smart, digital measurement solutions.



| Accessories   |  |  |                   |
|---|--|--|-------------------|
|   | Article  | Description  | Part no.          |
|  | Flue gas probe                                       | 170 mm, Ø 8 mm, with condensate filter cartridge           | 500265.1 + 500192 |
|   |  | 170 mm, Ø 8 mm, with condensate filter cartridge and draft | 500268.4 + 500192 |
|   |  | 290 mm, Ø 8 mm, with condensate filter cartridge and draft | 500267.3 + 500192 |
|  | Flue gas probe                                       | 240 mm, Ø 8 mm, with condensate filter cartridge and draft | 500246.1 + 500192 |
|  | Condensate filter cartridge                          | With filter disc   | 500192            |
|  | Filter package for small condensate trap             | 5x particle filter, 5x teflon membrane                     | 500214            |
|  | Intermediate filter NO <sub>x</sub> /SO <sub>x</sub> | For connection Ø 8 mm, with 1 refilling                    | 511064            |
|  | Refilling for intermediate filter                    | 5 pieces   | 511066            |

| Accessories   |                               |  |          |
|---|-------------------------------|--|----------|
|   | Article                       | Description  | Part no. |
|    | Combustion air sensor         | 80 mm, with magnet and cone, TÜV certified                         | 500141.1 |
|    | Combustion air sensor         | 20 mm, with cone   | 500141.4 |
|    | Combustion air sensor         | 200 mm, with cone, TÜV certified                                   | 500147   |
|    | Pitot tube                    | 630 mm, Ø 6 mm, max. 180 °C  | 500238   |
|    | Clamp probe CP 100            | Pipe diameters up to 45 mm, temperature range from -40 to 200 °C   | 525248   |
|  | Air sensor                    | For ambient temperature measurement                                | 521844   |
|  | EUROprinter II BLE            | Compact IR & Bluetooth® printer, with magnets                      | 524346   |
|   | EUROprinter II                | Compact infrared printer, with magnets                             | 524340   |
|  | Printer paper                 | For EUROprinter Thermo, 5 rolls                                    | 523374   |
|  | Power supply adapter          | For all BlueLine® instruments                                      | 523493   |
|  | Charging and data cable USB-C | USB to USB-C, length: 1 m  | 524697   |
|  | Display protection foil       | Including application instructions                                 | 511393   |
|  | Professional hard-shell case  | Robust case with document compartment, foam inlet and key-lock     | 511315   |
|  | Compact case                  | Small and robust, with foam inlet and document compartment         | 511304   |
|   | Option data logger            | Logging once per second during measurements, microSD card required | 511010   |



Distributor:

# SYSTRONIK

Messtechnologie

Member of AFRISO-EURO-INDEX group

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