



## UNIGAS 1000

Hand-held basic combustion gas analyzer with 2 sensors

UniGas 1000+ is a basic flue gas analyzer for 2 gases: O<sub>2</sub> & CO with electrochemical sensors, plus CO<sub>2</sub> calculated.

## Description

UniGas 1000+ is a basic flue gas analyzer for 2 gases: O<sub>2</sub> & CO with electrochemical sensors, plus CO<sub>2</sub> calculated.

The instrument is delivered with a built-in rugged impact printer. The analyzer and its internal printer are powered by the same internal battery. Charger is supplied as standard.

Smoke index measurement is performed by using the optional external hand pump (ref: F7828000). The results can be stored in the internal memory and printed on the report.

A procedure can be selected to monitor the CO in ambient air using the internal sensors. An internal program allows CO max measurement in atmospheric boiler room test with 15 logged values.

## Specifications

Measured parameter	Range	Resolution	UniGas 1000
O2	From 0 to 25% vol.	0.1%	EC
CO	From 0 to 8000 ppm	1 ppm	EC
CO2	From 0 to 99.9%	0.1%	Calc
Efficiency	From 1 to 99.9%	0.1%	Calc
Excess air	From 1 to infinite	0.01%	Calc
Pressure / Draft	From -10 to 120 hPa	0.01 hPa	✓
Tair/Tgas	-10...100°C / 0...600°C	0.1°C	Pt100 / Tc K Calc

## Further features

Zero calibration	Automatic calibration procedure at instrument power-on. Fresh air inlet with electrovalve and separate pneumatic circuit
Self-diagnosis	Sensor efficiency test with diagnostic page
Sampling pump	1.4 l/min - 100 mbar
Smoke measurement	Using the external manual pump
Printer	24 columns with 58 mm paper roll Autonomy: 40 reports with full battery

## General specifications

Size	115 x 90 x 330 mm
Weight	1.1 kg with battery and printer
Power supply	110 / 230 VAC (50/60 Hz)
Battery	Type: Rechargeable Li-ION Battery life: 6 hours continuous use Charging time: 8 h at 90%
Communication ports	RS 232

## Environmental specifications

Operating reference range	From -5°C to +45°C (up to 50°C for short time)
Storage temperature limits	From -20 to +50°C (3 months max. at temperatures exceeding the operational limits)

# Models and accessories

Instrument:

**Ordering code structure: 7820 - A - B - C - D - E - F / X**

*Please select the required options from tables A, B... below to define the right device reference.*

**7820 UniGas 1000**

Standard delivery includes:

- Base unit with 2 sensors (O<sub>2</sub> + CO)
- Li-ION battery + charger module
- Internal impact printer
- IR port for thermal printer
- Factory test report
- Instruction manual
- Warranty: 1 year

**Table A - Sensor n°1** (1 choice only)

1 O<sub>2</sub> (0 - 25%)

**Table B - Sensor n°2** (1 choice only)

2H CO (0 - 8,000 ppm) H<sub>2</sub> compensated + Dilution system

**Table C - Sample probes** - including water trap and line filter (1 choice only)

0 None

1 180 mm sampling dual hose probe BB610051 (Gas + Draft) - max 800°C

2 300 mm sampling dual hose probe BB610046 (Gas + Draft) - max 800°C

**Table D - Options (P is mandatory)**

P Built-in impact printer

**Table E - Mains adapter / Charger** (1 choice only)

1 115 V - 50 / 60 Hz - USA plug

3 230 V - 50 / 60 Hz - UK plug

4 230 V - 50 / 60 Hz - European plug

5 100 V - 50 / 60 Hz - USA / Japan plug

**Table F - Calibration certificate**

1 Factory certificate (gas + pressure + temperature)

**Table X - Customization**

INTL	English language - manual in English - English Keyboard
USA	English language - manual in English - English Keyboard
FR	French language - manual in French - French Keyboard
HOL	Dutch language - manual in English - English Keyboard
POL	Polish language - manual in English - English Keyboard
SPA	Spanish language - manual in English - English Keyboard
UK	English language - manual in English - English Keyboard

**Accessories:****Probes and sensors:**

BB610051	180 mm sampling dual hose probe BB610051 (Gas + Draft) - max 800°C
BB610046	300 mm sampling dual hose probe BB610046 (Gas + Draft) - max 800°C
BB830018	Pt100 remote air temperature sensor, with 2 m cable and positioning cone
F2132100	130 mm air TC K-type probe
F2137100	130 mm contact TC K-type probe
F2139000	Pipe Velcro TC K-type probe

**Test tools and miscellaneous:**

EE300088	Single hose pressure probe and burner hose kit
F7828000	Manual pump for smoke index measurements + 40 filters + table

**Software and connectors:**

BB260166	DBGas 2004 standard software
EE700476	USB adaptor cable

**Transport cases and protections:**

BB880028	ABS rigid carrying case
BB880043	Vinyl carrying case with shoulder strap
EE880047	Rubber holster with magnetic support



Consumable parts:

EE340006	Printer paper roll - <i>Minimum order of 10 pcs</i>
EE490002	Printer ribbon - <i>Minimum order of 3 pcs</i>
EE650011	Filter for soot (40 pieces per pack)
EE650074	Filter cartridge for EE650076 / EE 650082 water trap + filter - <i>Minimum order of 10 pcs</i>