



## GREENLINE 2000

Hand-held combustion gas analyzer  
with 2 sensors

GreenLine 2000 gas analyser can measure up to 2 gases: **O<sub>2</sub>, CO, NO** with electrochemical sensors. It accepts up to 10 different preloaded fuels. Further fuels can be added using GasConfig PC software.

## Description

GreenLine 2000 gas analyser can measure up to 2 gases: **O<sub>2</sub>, CO, NO** with electrochemical sensors. It accepts up to 10 different preloaded fuels. Further fuels can be added using GasConfig PC software.

Several flue gas sampling probes are available, with different lengths and shapes, in order to match every specific application requirement. The sampling probe is connected to the instrument with a single or dual hose.

### Key features:

- Accepts **up to 2 gas sensors** in different ranges, O<sub>2</sub>, CO and NO
- Measures up to 10 different fuels in standard. Other fuels can be added using GasConfig software.
- DBGas 2004 software allows the operator to easily manage all of the data & analysis information.

## Specifications

Measured parameter	Range	Resolution	GreenLine 2000
O <sub>2</sub>	From 0 to 25% vol.	0.1%	EC
CO	From 0 to 8000 ppm	1 ppm	EC
CO <sub>2</sub>	From 0 to 99.9%	0.1%	Calc
NO	From 0 to 4000 ppm	1 ppm	EC
NO <sub>x</sub>	From 0 to 4000 ppm	1 ppm	Calc
Efficiency	From 1 to 99.9%	0.1%	Calc
Excess air	From 1 to infinite	0.01%	Calc
Delta P	±100 hPa	0.01 hPa	✓
Tair/Tgas	-10...100°C / 0...1000°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
Gas level alarms	Programmable from PC with GasConfig software
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 7.2 Ah Battery life: 10 hours continuous use Charging time: 3 h at 90%
Communication ports	RS 232
Internal test memory	Up to 250 complete analysis data points structured by boiler

## Environmental specifications

Operating reference range	From -5°C to +45°C (up to 50°C for short time)
Storage temperature limits	From -20 to +60°C (3 months max. at temperatures exceeding the operational limits)

# Models and accessories

Instrument:

**Ordering code structure: 7816 - A - BB - C - D - PDDDDD - E - F - G / X**

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

## **7816                      GreenLine 2000**

Standard delivery includes:

- Base unit with 1 sensors (O<sub>2</sub>)
- Li-ION battery + charger module
- Draft and differential pressure measurement
- Internal impact printer
- Configuration software GasConfig
- Data management software DBGas2004 Lite version
- USB adapter
- Factory test report
- Instruction manual
- Warranty: 1 year

### **Table A - Sensor n°1**

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

### **Table B - Sensor n°2**

0                      None

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

4                      NO (0 - 4,000 ppm / res. 1 ppm) & NO<sub>x</sub> calculation

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

0                      None

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

5D                    750 mm sampling dual hose probe BB610080 (Gas + Draft) - max 800°C

F                      Sintered filter mounted on top of the probe, Ø8 mm - max 800°C

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

1                      Leak test kit (pump + hose + adapters)

2                      Internal sensor for gas leak detector (sniffer)

6                      DBGas 2004 standard software

8                      Pt100 remote air temperature sensor, with 2 m cable and positioning cone

9 Kit for differential pressure measurement (double hose)

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 - Accessories**

0 None

3 Vinyl carrying case with shoulder strap

4 ABS rigid carrying case

6 Manual pump for smoke index measurements + 40 filters + table

**Table G - 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:**

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

BB610080 750 mm sampling dual hose probe BB610080 (Gas + Draft) - max 800°C

BB830018 Pt100 remote air temperature sensor, with 2 m cable and positioning cone

BB830025 External probe for natural boiler draft (200 Pa)

F2132100 130 mm air TC K-type probe

F2137100 130 mm contact TC K-type probe

F2139000 Pipe Velcro TC K-type probe

F2139100	Tc K-type clamp temperature probe
F2139200	Pt100 clamp temperature probe
BB610057	3 m extension for dual hose probe and Tc
BB610103	6 m extension for dual hose probe and Tc

**Test tools and miscellaneous:**

EE300088	Single hose pressure probe and burner hose kit
EE300248	Kit for detecting leaks in gas networks (pump + hose + adapters)
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>

**Packing information:**

Size	115 x 90 x 330 mm
Weight	1.1 kg