CHEMIST 100 BE GREEN
UP TO 3 SENSORS PORTABLE COMBUSTION ANALYZER

MADE IN ITALY

11/05/18 09 22
ANALYS. 1 [1/3]
76.8 C
Tf   23.9 C
Ta   16.6 %
O2   2.4 %
CO2   11 p
CO   54 p
COr   Print

CHEMIST 100 BE GREEN 2-3 GAS SENSORS

PORTABLE COMBUSTION ANALYZER

2 or 3 GAS SENSORS

B/W BACKLIT LCD (50 x 50 mm)

USER FRIENDLY MENU

**15 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)**

RECHARGEABLE LITHIUM ION BATTERIES

STANDARD BLUETOOTH® CONNECTIVITY

**AUTOMATIC GENERATION OF QR CODE TO ACQUIRE
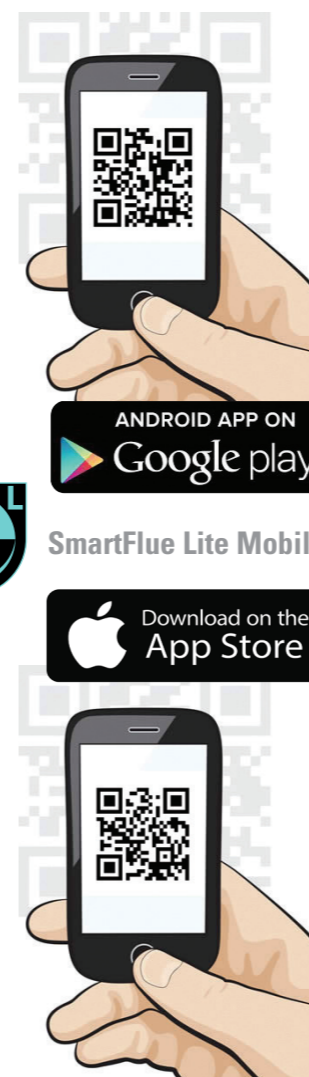ANALYSIS WITH SMARTPHONE**

DRAUGHT MEASUREMENT (OPTIONAL)

TIGHTNESS TEST (OPTIONAL)

Standard Bluetooth®

NEW

**CHEMIST100 BE GREEN
WARRANTY:
2 YEARS ON INSTRUMENT,
GAS SENSORS**

ANDROID APP ON
Google play

SmartFlue Lite Mobile

Download on the
App Store

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2
- Precalibrated gas sensors, field replaceable
- Plastic body with magnets
- Rubber protection holster
- Internal memory for 5 analyses
- Rechargeable Lithium Ion batteries
- Recharge: 6 hrs. up to 90%
- Up to 10 hrs. autonomy of continuous operation
- Self diagnostic function with sensors status
- 2 different programmed languages
- Dimensions: Analyzer 70x60x170mm (HxWxD), weight 0,35 Kg
- QR code generation for analyses detail (using the APP)
- Automatic recognition of condensation boiler

MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Gage and differential pressure
- O2
- CO
- Ambient CO
- NO (3 sensors version)

CALCULATED VALUES

- CO2
- NOx (if 3rd sensor is present)
- Boiler efficiency, including condensation
- Stack loss

KITS without printer

CHEMIST 101 BE GREEN

- 2 sensors (O2, CO)
- Not expandable
- No printer
- Bluetooth® module included

CHEMIST 102 BE GREEN

- 2 sensors (O2, CO)
- Expandable to NO 3° sensor
- No printer
- High precision draught measurement
- Bluetooth® module included
- Tightness test (optional)

CHEMIST 103 BE GREEN

- 3 sensors (O2, CO, NO)
- No printer
- High precision draught measurement
- Bluetooth® module included
- Tightness test (optional)

KITS with printer

CHEMIST 101 S BE GREEN

- 2 sensors (O2, CO)
- Not expandable
- With Bluetooth® printer
- Bluetooth® module included

CHEMIST 102 S BE GREEN

- 2 sensors (O2, CO)
- Expandable to NO 3° sensor
- With Bluetooth printer
- High precision draught measurement
- Bluetooth® module included
- Tightness test (optional)

CHEMIST 103 S BE GREEN

- 3 sensors (O2, CO, NO)
- With Bluetooth printer
- High precision draught measurement
- Bluetooth® module included
- Tightness test (optional)

EVERY KIT INCLUDES:
Instrument - Protective holster - Flue gas Probe 180 mm with 1,6 m cable Water trap - Power supply adapter - EU Plug - Hard plastic case - Calibration Certificate

CHEMIST 100 BE GREEN MAIN CONFIGURATIONS

FEATURES	101	102	103
O2 Sensor	✓	✓	✓
CO Sensor	✓	✓	✓
NO Sensor	-	-	✓
NOx Calculated	-	-	✓
Precalibrated and replaceable sensors	✓	✓	✓
Expandable to 3 sensors	-	✓	✓
Ambient CO measurement	✓	✓	✓
15 Programmed fuels	✓	✓	✓
Memory for 5 analyses	✓	✓	✓
Draft measurement with internal sensor (optional)	-	✓	✓
Gas pipe tightness (optional)	-	✓	✓
Gas pipes volume automatic calculation (optional)	-	✓	✓
Bluetooth® communication (class 1, up to 100 m)	✓	✓	✓
2 Years warranty	✓	✓	✓
Flue gas sensor probe 180 mm	✓	✓	✓

CHEMIST 100 BE GREEN TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CO high immunity H2 with NOx filter	Electrochemical sensor	0 .. 4000 ppm	1 ppm	±20 ppm ±5% measured value	0 .. 400 ppm 401 .. 4000 ppm
NO	Electrochemical sensor	0 .. 2000 ppm	1 ppm	±5 ppm ±5% measured value ±10% measured value	0 .. 100 ppm 101 .. 1000 ppm 1001 .. 2000 ppm
NOx	Calculated				
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
Air temperature	TcK sensor	-20.0 .. 120.0 °C	0.1 °C	±1 °C	
Flue gas temperature	TcK sensor	-20.0 .. 800.0 °C	0.1 °C	±1 °C ±1% measured value	0 .. 100 °C 101 .. 800 °C
Pressure (draught & differential)	Piezoeletric Sensor	-100.0 .. 200.0 hPa	0.01 hPa	±1% measured value ±0.02 hPa ±1% measured value	-100.00 .. -2.01 hPa -2.00 .. +2.00 hPa +2.01 .. +200.00 hPa
Differential temperature	Calculated	0 .. 800°C	0.1 °C		
Air index	Calculated	0.00 .. 9.50	0.01		
Excess air	Calculated	0 .. 850 %	1 %		
Stack loss	Calculated	0.0 .. 100.0 %	0.1 %		
Efficiency	Calculated	0.0 .. 120.0 %	0.1 %		
Efficiency (condensing)	Calculated	0.0 .. 120.0 %	0.1 %		

CHEMIST 100 BE GREEN SENSORS

GAS	RANGE	COD
CO high immunity H2 with NOx filter	0…4000 ppm	AACSE58
NO	0...2000 ppm	AACSE60
O2	0...21% v/v	AACSE50

SPARE PARTS AND ACCESSORIES

PROBES

COD	PHOTO	DESCRIPTION
AA SF71A		180 mm flue gas probe with 1,6 m cable
AA SF72A		300 mm flexible flue gas probe with 1,6 m cable

SENSORS, KIT AND EXTENSION

COD	PHOTO	DESCRIPTION
AAC KP02		Differential pressure measurement kit. 1 m hose + fitting
AA KT04		Kit for tightness test with 4 ways manifold, manual pump, 100 ml syringe, hoses, 2 silicone conical fittings

ACESSORIES

COD	PHOTO	DESCRIPTION
AAC FA01		Fine dust filters for AACTA03 (5 pcs. package)
AAC TA04		Water trap with dust filter without stainless steel fittings and silicon hose
AAC TA04A		Water trap with dust filter, stainless steel fittings and silicon hose suitable for all combustion analyzers

CASE, HOLSTER AND ACCESSORIES

COD	PHOTO	DESCRIPTION
AAP B13		Rechargeable Ni-MH battery, 7,4 V, 1800 mAh
AAC R09		Hard plastic kit case
AA SM07		Rubber holster

PRINTERS AND CONSUMABLES

COD.	PHOTO	DESCRIPTION
AA RC08		Plain thermal paper roll (AA ST01) A=57 mm Diam.=30 mm
AA RC09		Plain thermal paper roll uneraseble for Bluetooth printer (AAST01) A=57 mm Diam.=30 mm
AA ST01		Thermal printer with Bluetooth connection