

EMISSIONS MONITORING SYSTEM

HANDHELD MULTIGAS ANALYZER



**BEST
PERFORMANCE
BEST PRICE**

**LOW WEIGHT:
LESS THAN 800 gr.**

NOW WITH 7 SENSORS
New Sensors:
CO₂ 0 - 20 % (IR-Bench)
H₂S 0 - 500 ppm (EC Sensor)

COSA 707

THE MOST POWERFUL HANDHELD
MULTIGAS ANALYZER FOR INDUSTRIAL
COMBUSTIONS, EMISSION AND
PROCESS MONITORING MEASUREMENTS
USING UP TO 5 ELECTROCHEMICAL SENSORS



NOW WITH 7 SENSORS
 New Sensors:
 CO₂ 0-20% (IR-Bench)
 H₂S 0-500 ppm (EC Sensor)

COSA 707

THE MULTI TALENTED HANDHELD FLUE GAS ANALYZER USING UP TO 5 ELECTROCHEMICAL SENSORS

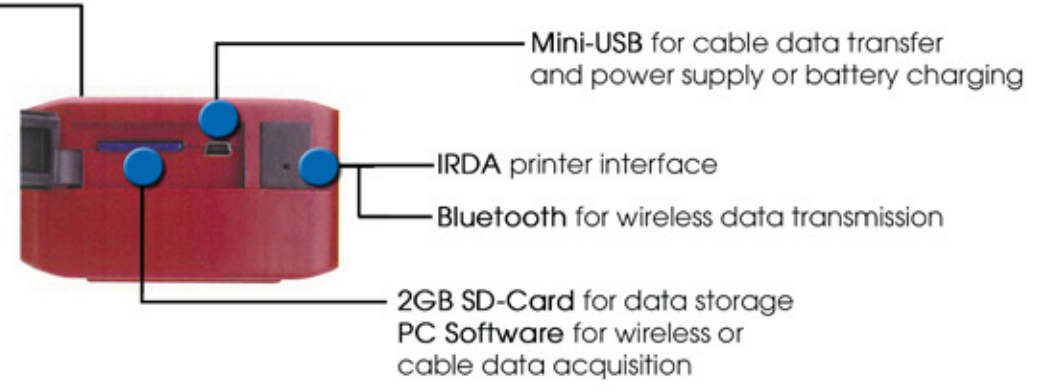
Suitable for emission monitoring of combustions & industrial processes

MAIN FEATURES:

- Modern, slimline enclosure with fixing magnets
- Super bright, color 3.5" TFT-display with LED backlight
- Mini-USB for cable data transfer
- IRDA interface for high speed infrared printer
- Integrated condensate trap with PTFE filter and LED backlight
- Menu guided software and function keys
- Robust stainless steel gas connectors
- Rechargeable Lithium-Ion battery for min. 15 hrs, or NiMH for min. 6 hrs operation
- Less than 800 gr. weight (for instrument only)

Measurement of:	
O ₂	0 ... 21,00 %
CO ₂ IR bench	0 ... 20,00 %
CO ₂ calculated value	0 ... 20,00 %
CO low	0 ... 300 ppm
CO/H ₂ compensated	0 ..10.000 ppm
NO low	0 ... 300 ppm
NO	0 ... 5.000 ppm
NO ₂	0 ... 1.000 ppm
NO _x	0 ... 5.000 ppm
SO ₂	0 ... 5.000 ppm
H ₂ S	0 ... 500 ppm
CO high	0 ... 2,0 %
CO very high	0 ... 10,00 %
Combustion air temperature	up to 100 °C
Stack gas temperature	up to 1.100 °C *
Stack draft measurement	± 100 hPa
Differential pressure	± 100 hPa
Differential temperature	up to 1.100 °C *

* with adequate probes

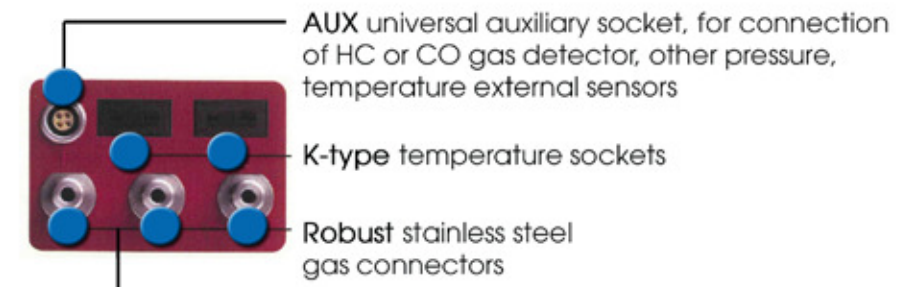


3.5" TFT Display
 Super bright, colour 3.5" TFT display with backlight and zoom function

CO-sensor protection by fresh air purging pump

Menu guided software and function keys

User friendly, dirt and moisture resistant keypad



Condensate Trap
 Effective, backlit condensate trap with reusable Teflon filter for protection against dirt and soiling



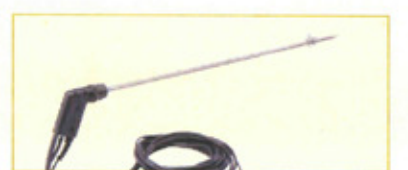
ABS transport case including infrared high speed printer



Shoulder strap



Gas flow velocity measurement with m/s, absolute pressure sensor and different pitot tubes



Probes and hoses
 MRU offers a wide range of standard (up to 650 °C) and industrial probes (up to 1.100 °C) with various lengths

Technical Specifications

OPTIMA 7 GAS ANALYZER	Handheld analyzer with up to 5 electrochemical sensors	
Fuel types	natural gas, liquid gas, oil heavy, oil light, pellets, wood, bio diesel, expandable fuel type list	
Measurement components:	range	accuracy
Oxygen O₂	0 ... 21,0 Vol-%	± 0,2 Vol-% abs.
Carbon dioxide CO₂ IR bench	0 ... 20 Vol-%	± 0,4 Vol-% abs.
Carbon monoxide CO (Hz-comp)	0 ... 4.000 ppm * overload up to 10.000 ppm	± 10 ppm or** 5 % reading up to 4.000 ppm or** 10 % reading up to 10.000 ppm
Carbon monoxide CO_{low} (special software and calibration)	0 ... 300 ppm (with 0,1 ppm resolution)	± 2,0 ppm or** 5 % reading
Carbon monoxide CO_{high}	0 ... 4.000 ppm * overload up to 20.000 ppm	± 100 ppm or** 5 % reading up to 4.000 ppm or** 5 % reading up to 20.000 ppm
Carbon monoxide CO_{very high}	0 ... 4,00 % * overload up to 10,00 %	± 0,02% or** 5 % reading up to 4,00 % or** 10 % reading up to 10,00 %
Nitric monoxide NO	0 ... 1.000 ppm * overload up to 5.000 ppm	± 5 ppm or** 5 % reading up to 1.000 ppm or** 10 % reading up to 5.000 ppm
Nitric monoxide NO_{low} (special software and calibration)	0 ... 300 ppm (with 0,1 ppm resolution)	± 2,0 ppm or** 5 % reading
Nitric dioxide NO₂	0 ... 200 ppm * overload up to 1.000 ppm	± 5 ppm or** 5 % reading up to 200 ppm or** 10 % reading up to 1.000 ppm
Sulfur dioxide SO₂	0 ... 2.000 ppm * overload up to 5.000 ppm	± 10 ppm or** 5 % reading up to 2.000 ppm or** 10 % reading up to 5.000 ppm
Hydrogen sulfide H₂S	0 ... 50 ppm * overload up to 500 ppm	± 5 ppm or** 5 % reading up to 100 ppm or** 10 % reading up to 500 ppm
Stack gas temperature T.Gas	0 ... 650 °C (stainless steel tube) 0 ... 1.100 °C (Inconel steel tube)	± 2 °C ... < 200 °C or**1 % reading up to 200 °C ± 2 °C ... < 200 °C or**1 % reading up to 200 °C
Differential temperature	up to 650 °C or up to 1.100 °C (with suitable temperature sampling tube)	
Combustion air temperature T.Air	0 ... 100 °C	± 1 °C
Draft / Differential pressure	- 100 ... + 100 hPa	± 0,02 hPa
Calculated values: (fuel type depending)		
Carbon dioxide CO₂	0 ... 20 %	± 0,3 Vol-% abs.
Heat losses q_A	0 ... 99,9 %	
Efficiency η	0 ... 120 %	
Air Ratio λ	1, ... 9,99 %	
Excess Air	0 ... 99,9 %	
Combustion calculations	based on the large fuel type list like: CO ₂ , excess air, heat losses, combustion efficiency, flue gas dew point, CO / CO ₂ ratio	
Emission calculations	mg/Nm ³ , NO _x as mg/m ³ NO ₂ true measurement of NO _x = NO + NO ₂ , including O ₂ referencing (normalisation) to user settable value	
CO-sensor purge (option)	using 2nd pump, for sensor protection	
General specifications:		
Operation temperature	+ 5 ... + 45 °C, max. 95 % RH, none condensing	
Storage temperature	0 ... + 50 °C	
Ambient conditions	not in aggressive, corrosive or high dust ambience, not for use in hazardous areas	
Power supply	High energy Lithium-Ion battery 15 h operation or NiMH battery, min. 6 h operation	
Mains	wall-plug grid power supply, 100 - 240 Vac / 50 ... 60 Hz	
Protection class	IP 20	
Weight	approx. 750 g (with 2 sensors)	* for SHORT-TERM measurements only!
Dimensions	(W x H x D) 110 x 225 x 52 mm	** which ever is larger!

DATA SUBJECT TO CHANGE WITHOUT NOTICE



COSA Xentaur

84G Horseblock Road, Yaphank, NY 11980

7125 North Loop East, Houston, TX 77028

55 Oak Street, Norwood, NJ 07648

Tel: +1.631.345.3434

E-Mail: Sales@cosaxentaur.com

Web: www.cosaxentaur.com