



Environmental Equipment, Inc.

3634 Central Ave. · St. Petersburg, Florida 33711 · Phone 727-328-2818 · 800-RING-IMR · FAX 727/328-2826 · E-mail: info@imrusa.com
www.imrusa.com

COMBUSTION GAS ANALYZER IMR 1400 CO



IMR 1400 CO

IMR 1400 CO

The combustion gas analyzer IMR 1400 CO is easy to use, compact and rugged. Two CO-sensors are installed, one for low CO-measurements and one for high CO-measurements. This helps to get the best possible accuracy for different applications (e.g. wood fired applications).

Measured parameters:

- Oxygen O₂
- Carbon monoxide CO in ppm
- Carbon monoxide CO in Vol. %

Calculated parameters:

- Losses q_A
- Combustion Efficiency ETA
- Excess Air LAMBDA
- Carbon dioxide CO₂

The series IMR 1400 CO can also measure draft, soot and stack gas temperature and ambient temperature.



IMR 1400CO – Overview

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ■ Case:
Rugged aluminum with an additional compartment ■ Sensors:
O₂-CO-CO ■ Display:
Illuminated and simultaneous display of 8 values ■ Fuels:
7 programmed; 5 programmable ■ Units:
ppm, mg, mg(O₂), mg/kWh ■ Interface:
RS232 ■ Memory:
200 measurements ■ Battery:
Status is shown on the LCD;
6 hrs | <ul style="list-style-type: none"> ■ Printer:
Hightspeed thermal-printer;
Width 58mm;
Capable of printing 1, 2 or 3 printouts at once with all values including date, time and fuel type ■ CO-Switch:
Solenoid valve to automatically switch between the low and high CO-sensor. ■ Soot measurement:
2nd pump to purge the low CO-sensor (faster regeneration); ■ Zero-point adjustment:
3 min ■ Serviceprogram:
Component check and printout capability of all parameters; | <ul style="list-style-type: none"> Monitoring working hours ■ Gas sampling probe:
Heated handle (soot);
l=270mm; Ø 10mm;
Thermocouple Type K;
Hose length 3.5m ■ Ambient temperature probe:
l=150mm;
Line 3.5m ■ Condensation trap:
Integrated Filter ■ Power:
12VDC;
240VAC/50Hz;
120VAC/60Hz ■ Operating temperature:
10°C..40°C ■ Storage temperature:
-20°C..50°C |
|---|--|--|

THE PRIDE OF THE COMPANY - MADE IN USA -

© Copyright 2006 IMR Environmental Equipment, Inc.



Environmental Equipment, Inc.

3634 Central Ave. · St. Petersburg, Florida 33711 · Phone 727-328-2818 · 800-RING-IMR · FAX 727/328-2826 · E-mail: info@imrusa.com
www.imrusa.com

TECHNICAL DATA

PARAMETER	PRINCIPLE	RES.	ACC.	RANGE	IMR 1400CO
O ₂ Oxygen	Electro-chemical	0.1 Vol.%	± 0.2 %	0-20.9Vol. %	✓
CO Carbon monoxide	Electro-chemical	1 ppm	Z	0-2000 ppm	✓
CO Carbon monoxide	Electro-chemical	0.001 Vol.%	Z	0-4.000 Vol.%	✓
NO Nitric oxide	Electro-chemical	1 ppm	Z	0- 2000 ppm	optional
SO ₂ Sulfur dioxide	Electro-chemical	1 ppm	Z	0- 4000 ppm	optional
TG Stack gas temperature	Thermocouple K	1 K	± 2 %	-20°C / 1200°C	✓
VL Ambient temperature	Semiconductor	1 K	± 0.5 K	-20°C / 120°C	✓
P Draft	Solid state	0.01 hPa	± 2 %	-30hPa / +50hPa	✓
CO ₂ Carbon dioxide	Calculation	0.1 Vol.%	± 0.2 %	0- CO ₂ max	✓
ETA Efficiency	Calculation	0.1 %	± 0.5 %	0-99.9 %	✓
qA Losses	Calculation	0.1 %	± 0.5 %	0-99.9 %	✓
λ Excess Air	Calculation	0.01	± 2 %	1-9.99	✓
Soot	Filter paper				✓

Other measuring ranges upon request

Max. 4 sensors

Z = 0-20% of the measuring range ± 1% of the maximum value
= 21-100% of the measuring range ± 5% of the displayed value

STANDARD

Combustion gas analyzer Dimensions in mm: 425 x 185 x 290 Weight in kg: 5.8
High speed thermal printer
Gas sampling probe S with heated handle
Ambient temperature probe
Condensation trap with integrated filter
Soot paper, soot scale
Power cord
Manual
Calibration certificate



Model	Sensors	Part-No.
IMR 1400CO	O2, CO, CO	14291

Distributor:

IMR Environmental Equipment, Inc. reserves the right to adopt technical modifications without prior notice.

THE PRIDE OF THE COMPANY - MADE IN USA -

© Copyright 2006 IMR Environmental Equipment, Inc.