

## COMBUSTION GAS ANALYZER IMR 1400 – IR

### IMR 1400 – IR

#### *Measures CO<sub>2</sub> with NDIR Technology*

This latest model does not only measure the most common parameters but also CO<sub>2</sub> !!

- Measures flue gases of
  - Boilers
  - Burners
  - Engines
- Developed to meet the customers need
- High quality combustion gas analyzer using the latest sensor technology
- Easy to use and will measure all important parameters to adjust and optimize the combustion process
- Includes all needed features for a complete analysis



### STANDARD FEATURES

- Portable and very compact combustion gas analyzer housed in a rugged aluminum case
- Simultaneous measurement of
 

O <sub>2</sub>	Oxygen	CO <sub>2</sub>	Carbon Dioxide
NO	Nitric oxide	CO	Carbon monoxide
TG	Flue-gas temperature	AG	Ambient air temperature
- Calculation of following parameters according ASME-equations
 

Combustion efficiency	Losses
Excess Air	
- 7 Fuels are programmed – 5 fuels are programmable
- Automatic zero calibration
- Thermal printer
- Electronic controlled soot measurement
- Draft measurement
- CO-bypass valve with purging pump
- RS 232 interface
- Memory for 200 measurements
- Rechargeable battery with charger
- 12V DC power jack
- Integrated self-check program
- Simultaneous display of eight parameters on the illuminated display
- Unit selection : ppm - mg - mg(ref O<sub>2</sub>) – mg/kWh
- Gas sampling probe S with heated handle – length 0.9 ft , hose 11.5 ft
- Power supply 110V or 230V

**NEW  
CO<sub>2</sub> NDIR SENSOR**

### OPTIONAL FEATURES

- ◆ Gas sampling probes with different lengths
- ◆ NO<sub>2</sub>-measurement
- ◆ SO<sub>2</sub>-measurement
- ◆ HC/CH<sub>4</sub>-measurement NDIR



Environmental Equipment, Inc.



PARAMETER	PRINCIPLE	RESOLUTION	ACCURACY	RANGE	STANDARD
<b>O<sub>2</sub></b> <b>Oxygen</b>	Electro-chemical cell	0.1 Vol.%	± 0.2 %	0-20.9 Vol. %	✓
<b>CO<sub>2</sub></b> <b>Carbon dioxide</b>	<b>NDIR</b>	0.01 Vol.%	± 5 %	0- 30 Vol.%	✓
<b>CO</b> <b>Carbon monoxide</b>	Electro-chemical cell	1 ppm	5 %	0-2000/4000ppm	✓
<b>CO<sub>p</sub></b> <b>CO pure</b>	Calculation	1 ppm	5 %		✓
<b>NO</b> <b>Nitric oxide</b>	Electro-chemical cell	1 ppm	5 %	0-2000 ppm	
<b>NO<sub>2</sub></b> <b>Nitric dioxide</b>	Electro-chemical cell	1 ppm	5 %	0- 100 ppm	
<b>SO<sub>2</sub></b> <b>Sulfur dioxide</b>	Electro-chemical cell	1 ppm	5 %	0-4000 ppm	
<b>HC/CH<sub>4</sub></b> <b>Hydrocarbons</b>	<b>NDIR</b>	0.1%	5 %	0-100% LEL	
<b>TG</b> <b>Flue gas temperature</b>	NiCr-Ni thermocouple	1 K	± 2 %	-4°F / 2192°F -20°C / 1200°C	✓
<b>TA</b> <b>Air temperature</b>	Semiconductor	1 K	± 0.5 K	-4°F / 248°F -20°C / 120°C	✓
<b>P</b> <b>Draft</b>	Solid state	0.01 hPa	± 2 %	±40 hPa	✓
<b>Efficiency</b>	Calculation	1 %	± 0.5 %	0-100 %	✓
<b>Losses</b>	Calculation	1 %	± 0.5 %	0-100 %	✓
<b>Excess Air</b>	Calculation	1 %	± 2 %	0-999 %	✓
<b>Soot</b>	Filter paper method				✓

Other measurement ranges are available upon request

Max 4 sensors are possible    Standard: O<sub>2</sub>, CO, CO<sub>2</sub> – 1 more sensor is possible(NO or NO<sub>2</sub> or SO<sub>2</sub> or HC)

**MODEL**

IMR 1400 - IR

Dimensions (inch): 16.7 x 7.3 x 11.4

Weight: 13 lb. (5.8kg)

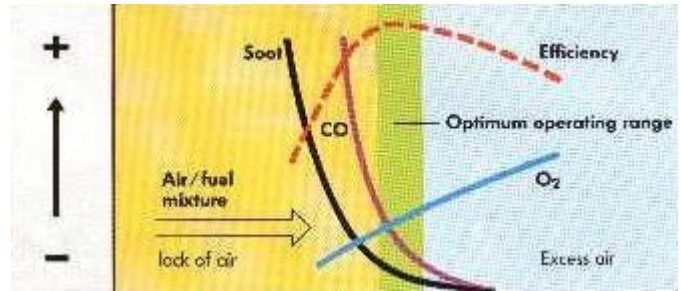
**PART-NO.**

IMR 14296

**Useable for all fuels**

Solid, liquid and gaseous fuels have varying calorific values according to quality. To calculate fuel efficiency IMR analyzers store the most common fuel factors. The fact whether improvement is made through a blower or atmospherically is taken into account. If desired any other fuel factor can be entered by IMR. Apart from this IMR combustion gas analyzers have programmable storage locations so that the operator himself can enter unusual fuel factors on the job. The fuel factor program is modified according to countries so that for each country the appropriate fuel factors are available.

Represented by:



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