

**COMBUSTION GAS ANALYZER
IMR 1400 SERIES – WITH NDIR****IMR 1400 – IR****Measures CO₂ + HC/CH₄ with NDIR Technology**

- ❖ Designed to measure flue gases on
 - Boilers
 - Burners
 - Engines
 - Cars/Trucks
 - Generators
 - Forklifts
- ❖ Developed to meet the customers need
- ❖ High quality combustion gas analyzer using the latest sensor technology
- ❖ Easy to use and measures all the important parameters to adjust and optimize the combustion process
- ❖ Integrated Printer: each printout includes all information on the display
- ❖ Applications: Boilers, Burners, Engines, Turbines, Cars, Trucks, Plants, Chemical Industries, Steel Plants, Refineries, etc.

IMR 1400-IR**STANDARD FEATURES**

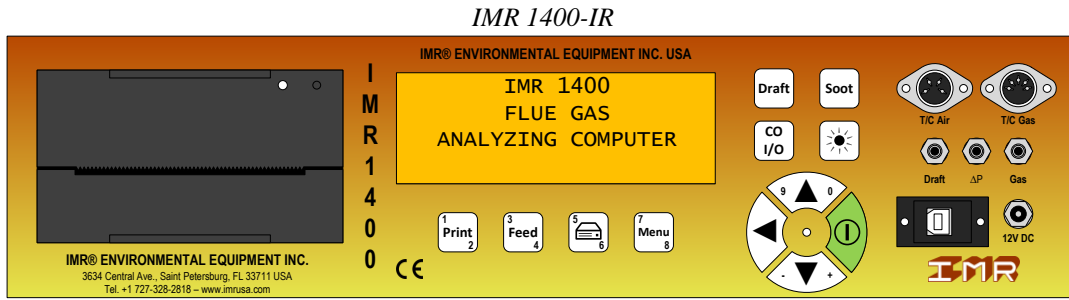
- ❖ Portable and very compact combustion gas analyzer housed in a rugged aluminum case
- ❖ Simultaneous measurement of
 - O₂ Oxygen
 - CO Carbon Monoxide
 - CO₂ Carbon Dioxide
 - HC Hydrocarbons
 - TG Flue-gas temperature
- ❖ Calculation of following parameters according ASME-equations
 - Combustion efficiency
 - Losses
 - Excess Air
- ❖ 7 Fuels are programmed – 5 fuels are programmable
- ❖ Automatic zero calibration
- ❖ Integrated self-check program
- ❖ Simultaneous display of eight parameters on the illuminated display
- ❖ Printer with programmable print out cycles

- ❖ Unit selection: ppm - mg - mg (ref O₂) – mg/kWh
- ❖ Gas sampling probe E: – length 250mm (0.8ft.), hose 2.5m (8ft.)
- ❖ Probe useable in temperatures up to 2192°F / 1200°C
- ❖ Rechargeable battery with integrated charger
- ❖ Selectable power supply 120V or 230V

OPTIONAL FEATURES

- ❖ Gas sampling probes with different lengths
- ❖ Electronic controlled soot measurement
- ❖ Draft measurement
- ❖ NO-measurement
- ❖ SO₂-measurement
- ❖ NO₂-measurement
- ❖ H₂S-measurement
- ❖ CO-bypass valve with purging pump
- ❖ 12V DC power jack
- ❖ USB interface for real-time uploading of measurements to PC
 - Memory for 200 measurements
- ❖

IMR 1400 Series - Infrared



IMR 1400IR

Parameter	Principle	Resolution	Range
O ₂ – Oxygen	Electro-Chemical	0.1 % vol.	0-20-9% vol.
CO – Carbon Monoxide	Electro-Chemical	1 ppm	0-2000/4000ppm
CO ₂ – Carbon Dioxide	NDIR	0.1 % vol.	0-20% vol.
HC/CH ₄ – Hydrocarbons	NDIR	0.1 % vol.	0-100 % lel
TG – Temperature Gas	NiCr-Ni Thermocouple	1°C / 1°F	-20-1200°C 0-2192°F
Combustion Efficiency	Calculated	1 %	0-100 %
Heat Losses	Calculated	1 %	0.0-99.9 %
Excess Air	Calculated	1 %	1.0-9.0 %

Optional Sensors

SO ₂	Electro-Chemical	1 ppm	0-4000 ppm
NO	Electro-Chemical	1 ppm	0-2000 ppm
NO ₂	Electro-Chemical	1 ppm	0-100 ppm
H ₂ S	Electro-Chemical	1 ppm	0-200 ppm

Optional Features

Soot Measurement	Filter Paper Method		
Draft	Solid State	hPa	0-40 hPa
12V DC Charging			
USB	Upload to PC in real-time		
Memory	200 Measurements		

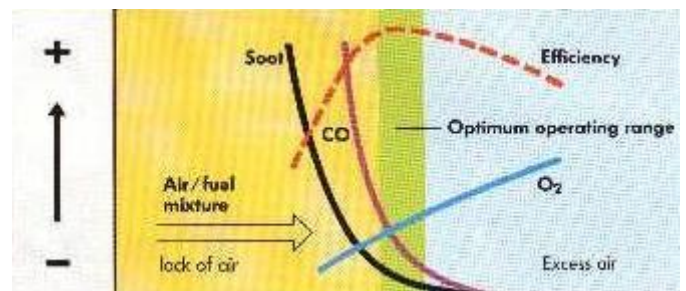
Other measurement ranges are available upon request

Tolerance ± 2%

Equipped with 4 sensors max

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.





IMR 1400 Series - Infrared

Model Selection

	O2, CO, CO2, HC, Flue Temp., Efficiency, Losses, Excess Air	Soot Measurement, Soot Gas Probe, Soot Filter & Comparison Scale, Draft, 12V DC charging, USB, Memory
	Item #	Item #
IMR 1400IR (Basic)	14296	14296-S

Customized sensor configuration available on request.

Different gas probe lengths available: Select from 250mm, 750mm*, 1500mm*
*additional cost

ASM	Metric
Dimensions: 16.7"x11.4"x7.3"	Dimensions: 425x290x185mm
Weight: 13lb	Weight: 5.8kg

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

Optional Equipment

RPM Meter
Tachometer: 180-10,000 RPM
DC: 200mV to 1000V
AC: 200V to 750V



Pitot Tube
Measure flow in m/s



Soot Meter
Measures precise soot number from 0.0 to 9.9
More accurate than a paper scale



IMR Data Software
Upload stored measurements or upload data in real time



Dealer: