



COMBUSTION GAS ANALYZER IMR 1400 – IR

IMR 1400 – IR

Measures CO2 with NDIR Technology

This latest model does not only measure the most common parameters but also CO2 !!

- 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

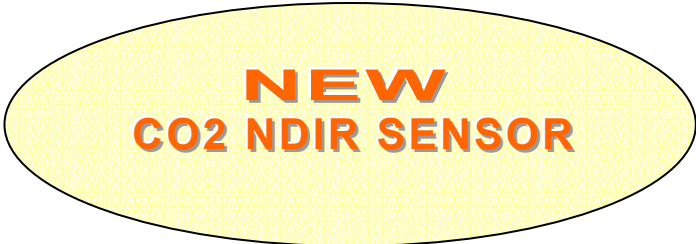


STANDARD FEATURES

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

| | | | |
|----------------|----------------------|-----------------|-------------------------|
| O ₂ | Oxygen | CO ₂ | 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 O₂) – mg/kWh
- Gas sampling probe S with heated handle – length 0.9 ft , hose 11.5 ft
- Power supply 110V or 230V



OPTIONAL FEATURES

- ◆ Gas sampling probes with different lengths
- ◆ NO₂-measurement
- ◆ SO₂-measurement
- ◆ HC-measurement



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| PARAMETER | PRINCIPLE | RESOLUTION | ACCURACY | RANGE | STANDARD |
|--------------------------------------|-----------------------|-------------------------|----------|------------------------------|----------|
| O₂ Oxygen | Electro-chemical cell | 0.1 Vol.% | ± 0.2 % | 0-20.9 Vol. % | ✓ |
| CO₂ Carbon dioxide | NDIR | 0.01 Vol.% | ± 5 % | 0- 30 Vol.% | ✓ |
| CO Carbon monoxide | Electro-chemical cell | 1 ppm | 5 % | 0-2000/4000ppm | ✓ |
| CO_p CO pure | Calculation | 1 ppm | 5 % | | ✓ |
| NO Nitric oxide | Electro-chemical cell | 1 ppm | 5 % | 0-2000 ppm | |
| NO₂ Nitric dioxide | Electro-chemical cell | 1 ppm | 5 % | 0- 100 ppm | |
| SO₂ Sulfur dioxide | Electro-chemical cell | 1 ppm | 5 % | 0-4000 ppm | |
| HC Hydrocarbons | Solide state | 0.1% | 5 % | 0-100% LEL | |
| TG Flue gas temperature | NiCr-Ni thermocouple | 1 K | ± 2 % | -4°F / 2192°F | ✓ |
| TA Air temperature | Semiconductor | 1 K | ± 0.5 K | -4°F / 248°F | ✓ |
| P Draft | Solid state | 0.004" H ₂ O | ± 2 % | - 12" / 20" H ₂ O | ✓ |
| Efficiency | Calculation | 1 % | ± 0.5 % | 0-100 % | ✓ |
| Losses | Calculation | 1 % | ± 0.5 % | 0-100 % | ✓ |
| Excess Air | Calculation | 1 % | ± 2 % | 0-999 % | ✓ |
| Soot | Filter paper method | | | | ✓ |

Other measurement ranges are available upon request

Max 4 sensors are possible Standard: O₂, CO, CO₂ – 1 more sensor is possible(NO or NO₂ or SO₂ or HC)

MODEL

IMR 1400 - IR
 Dimensions (inch): 16.7 x 7.3 x 11.4
 Weight: 13 lb. (5.8kg)

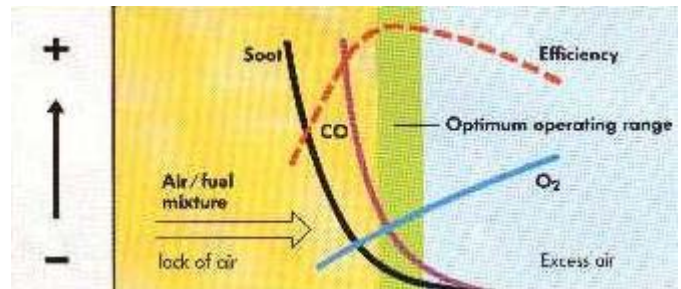
PART-NO.

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