



IR - FLUE GAS ANALYZER

IMR 2800-IR

THE ALL NEW IMR 2800-IR Series

NEW FEATURES OF THE 2800IR-Series

- Latest sensor technology for a more accurate measurement and longer life time
- Improved interior design for easier service and better unit protection
- Continuously and simultaneously measuring up to 18 parameters
- Larger display for a better reading
- Applications: Boilers, Burners, Engines, Turbines, Cars, Trucks, Plants, Chemical Industries, Steel Plants, Refineries, etc



STANDARD FEATURES

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

O ₂	Oxygen	NO ₂	Nitrogen dioxide
CO	Carbon Monoxide	SO ₂	Sulfur dioxide
NO	Nitric oxide	TG	Flue-gas temperature
TA	Ambient Air temperature		
- Calculation of following parameters

Losses / Efficiency	NO _x	Nitrogen Oxides
Excess Air / Lambda	CO ₂	Carbon Dioxide
- Automatic zero calibration
- Integrated self-check program
- Simultaneous display parameters on the illuminated display
- Printer with programmable print out cycles
- Standard deviation and average value calculation
- Draft measurement with optional upgrade for differential draft and velocity measured with a Pitot tube
- Unit selection : ppm – mg/Nm³ – mg/Nm³(ref O₂)
- Gas sampling probe E – length 0.8 ft (250mm), hose 8 ft (2.5m)
- Rechargeable battery with charger
- Power supply 110V or 230V

OPTIONAL FEATURES

- ◆ HCl, N₂O, CL₂, H₂, NH₃, HC or H₂S measurement
- ◆ CO₂, CH₄/HC and N₂O NDIR sensors available
- ◆ Speed RPM
- ◆ Prepared for high temperature measurement (up to 2732 °F / 1500 °C)
- ◆ Gas sampling probes with different lengths
- ◆ Soot measurement
- ◆ Pitot Tube
- ◆ Gas Flow m/s
- ◆ Additional Instruments: RPM Meter, Soot Meter



Environmental Equipment, Inc.

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

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PARAMETER	PRINCIPLE	RESOLUTION	ACCURACY	RANGE**	STANDARD
O₂ Oxygen	Electro-chemical cell	0.1 Vol. %	± 0.2 Vol. %	0-20.9 Vol. %	✓
CO Carbon monoxide	NDIR	0.001 Vol. %	Z	0-10/20 Vol. %	✓
CO₂ Carbon dioxide	NDIR	0.01 Vol. %	± 0.2 Vol. %	0-20 Vol. %	✓
HC/CH₄ Hydrocarbons	NDIR	0.1 %	Z	0-100% LEL	✓
NO Nitric oxide	Electro-chemical cell	1 ppm	Z	0-2000 ppm	✓
NO₂ Nitrogen dioxide	Electro-chemical cell	1 ppm	Z	0- 100 ppm	
SO₂ Sulfur dioxide	Electro-chemical cell	1 ppm	Z	0-4000 ppm	✓
H₂S Hydrogen Sulfide	Electro-chemical cell	1 ppm	Z	0- 200 ppm	
TG Flue gas temperature	NiCr-Ni thermocouple	1 K	± 2 %	-4°F - 2192°F	✓
TA Air temperature	Semiconductor	1 K	± 0.2 K	0°C - 1200°C	
P Draft	Solid state	0.01 hPa	± 2 %	-4°F / 248°F	✓
NO_x Nitrogen oxides	Calculation	1 ppm	Z	0°C - 120°C	
NH₃ Ammonia	Electro-chemical	1 ppm	Z	±40 hPa	
N₂O Nitrous Oxide	NDIR	0.001 Vol. %	Z	0-NO _x max	
HCl Hydrogen Chloride	Electro-chemical	1 ppm	Z	0-1000/5000 ppm	
Cl₂ Chlorine	Electro-chemical	1 ppm	Z	0-200 ppm	
H₂ Hydrogen	Electro-chemical	1 ppm	Z	0-5000 ppm	
Losses / Efficiency	Calculation	0.1 %	± 0.1 %	0-10000 ppm	
Excess Air / Lambda	Calculation	0.1 %	± 0.1 %	0-99.9 %	✓
Soot	Filter paper method			1.0-9.99	✓
Velocity with Pitot tube	Solid state	0.01 m/s	± 2 %	0-9	
RPM Meter	Solid state	100 RPM	± 2 %	0-80 m/s	
				180-10000 RPM	

** Different/customized ranges available.

Equipped with a maximum of 8 gas sensors

Z = 0 - 20 % of whole measurement range ± 5 %
21 - 100 % of whole measurement range ± 1 % of displayed measurement

MODEL
IMR 2800-IR
Dimensions (inch): 15 x 6.5 x 12.4
(375mm x 165mm x 300mm)
Weight: 17 lbs. (8 kg)

PART-NO.
IMR 28100

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*****
*   IMR 2800   *
*****
17.06.2013 15:01:19
fuel oil ex. lsh.
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T-room 29°C
T-gas 29°C
CO2 0.0 %
O2 20.9 %
CO 0PPM
SO2 0PPM
NO 0PPM
NOx ++PPM
eA ++++ %
LAMBDA ++++ %
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OPTIONAL ITEM
Soot Meter

PART-NO.
Soot Meter



RPM Meter

RPM Meter



Pitot Tube

Pitot Tube

Represented by:

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

THE PRIDE OF THE COMPANY - MADE IN USA -