



Environmental Equipment, Inc.

3632 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

## COMBUSTION GAS ANALYZER

### THE ALL NEW IMR 2800 P Series

#### NEW FEATURES OF THE 2800P-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<sub>2</sub>      Oxygen      NO<sub>2</sub>      Nitrogen dioxide
- CO      Carbon Monoxide      SO<sub>2</sub>      Sulfur dioxide
- NO      Nitric oxide      TG      Flue-gas temperature
- TA      Ambient Air temperature
- Calculation of following parameters      Losses / Efficiency      NO<sub>x</sub>      Nitrogen Oxides
- Excess Air / Lambda      CO<sub>2</sub>      Carbon Dioxide
- 23 Fuels are programmed – 4 fuels are programmable
- Automatic zero calibration
- Integrated self-check program
- Simultaneous display parameters on the illuminated display
- Printer with programmable print out cycles
- RS232 (DB9/USB type B port)
- 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/Nm<sup>3</sup> – mg/Nm<sup>3</sup>(ref O<sub>2</sub>)
- Gas sampling probe E – length 0.8 ft (250mm), hose 8 ft (2.5m)
- Rechargeable battery with charger
- Power supply 110V or 230V or 12VDC Power Jack

#### OPTIONAL FEATURES

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|--|---|
| <ul style="list-style-type: none"><li>◆ HCl, N<sub>2</sub>O, Cl<sub>2</sub>, H<sub>2</sub>, NH<sub>3</sub>, HC or H<sub>2</sub>S measurement</li><li>◆ CO<sub>2</sub>, CH<sub>4</sub>/HC and N<sub>2</sub>O NDIR sensors available</li><li>◆ Speed RPM</li><li>◆ Prepared for high temperature measurement<br/>(up to 2732 °F / 1500 °C)</li></ul> | <ul style="list-style-type: none"><li>◆ Gas sampling probes with different lengths</li><li>◆ Soot measurement</li><li>◆ Pitot Tube</li><li>◆ Gas Flow m/s</li><li>◆ Additional Instruments: RPM Meter, Soot Meter</li></ul> |
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## THE ALL NEW IMR 2800 P

PARAMETER	PRINCIPLE	RESOLUTION	ACCURACY	RANGE**	STANDARD
O <sub>2</sub> <b>Oxygen</b>	Electro-chemical cell	0.1 Vol.%	± 0.2 Vol. %	0-20.9 Vol. %	✓
CO <b>Carbon monoxide</b>	Electro-chemical cell	1 ppm	Z	0-2000/4000ppm	✓
	NDIR	0.001 Vol.%		0-10/20 Vol.%	NDIR Optional
NO <b>Nitric oxide</b>	Electro-chemical cell	1 ppm	Z	0-2000 ppm	✓
NO <sub>2</sub> <b>Nitrogen dioxide</b>	Electro-chemical cell	0.1 ppm	Z	0- 100 ppm	✓
SO <sub>2</sub> <b>Sulfur dioxide</b>	Electro-chemical cell	1 ppm	Z	0-4000 ppm	✓
H <sub>2</sub> S <b>Hydrogen Sulfide</b>	Electro-chemical cell	0.1 ppm	Z	0- 200 ppm	
HC/CH <sub>4</sub> <b>Hydrocarbons</b>	Pellistor or NDIR	0.1 %	Z	0-100% LEL	
TG <b>Flue gas temperature</b>	NiCr-Ni thermocouple	1°C/1°F	± 2 %	-4°F - 2192°F 0°C - 1200°C	✓
TA <b>Air temperature</b>	Semiconductor	1°C/1°F	± 2 %	-4°F / 248°F 0°C - 120°C	✓
P <b>Draft</b>	Solid state	0.01 hPa	± 2 %	±40 hPa	✓
NO <sub>x</sub> <b>Nitrogen oxides</b>	Calculation	1 ppm	Z	0-NO <sub>x</sub> max	✓
CO <sub>2</sub> <b>Carbon dioxide</b>	Calculation	0.1 Vol.%	± 0.2 Vol. %	0-CO <sub>2</sub> max	✓
CO <sub>2</sub> <b>Carbon dioxide</b>	NDIR	0.01 Vol.%	± 0.2 Vol. %	0-20 Vol. %	
NH <sub>3</sub> <b>Ammonia</b>	Electro-chemical	1 ppm	Z	0-1000/5000 ppm	
N <sub>2</sub> O <b>Nitrous Oxide</b>	NDIR	0.001 Vol. %	Z	0-1 Vol. %	
HCl <b>Hydrogen Chloride</b>	Electro-chemical	1 ppm	Z	0-200 ppm	
Cl <sub>2</sub> <b>Chlorine</b>	Electro-chemical	1 ppm	Z	0-5000 ppm	
H <sub>2</sub> <b>Hydrogen</b>	Electro-chemical	1 ppm	Z	0-10000 ppm	
Losses / Efficiency	Calculation	0.1 %	± 0.1 %	0-99.9 %	✓
Excess Air / Lambda	Calculation	0.1 %	± 0.1 %	1.0-9.99	✓
Soot	Filter paper method			0-9	
Velocity with Pitot tube	Solid state	0.01 m/s	± 2 %	0-80 m/s	
RPM Meter	Solid state	100 RPM	± 2 %	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 P  
Dimensions (inch): 15 x 6.5 x 12.4  
(375mm x 165mm x 300mm)  
Weight: 17 lbs. (8 kg)

**PART-NO.**  
IMR 28000

\*\*\*\*\*  
\* IMR 2800 \*  
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fuel oil ex.1sh.

**OPTIONAL ITEM**



**PART-NO.**  
Soot Meter



**PART-NO.**  
RPM Meter



**PART-NO.**  
Pitot Tube

Represented by:

T-room 29°C  
T-gas 29°C  
CO2 0.0 %  
O2 20.9 %  
CO 0 ppm  
SO2 0 ppm  
NO 0 ppm  
NOx ++ppm  
qA ++++ %  
LAMBDA ++++ %

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

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