

## COMBUSTION GAS ANALYZER

IMR 2800 P

### 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
- 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

#### OPTIONAL FEATURES

- ◆ 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
- ◆ CO<sub>2</sub>, CH<sub>4</sub>/HC and N<sub>2</sub>O NDIR sensors available
- ◆ Speed RPM
- ◆ Prepared for high temperature measurement (up to 2732 °F / 1500 °C)
- ◆ Gas sampling probes with different lengths
- ◆ Soot measurement
- ◆ Gas Flow m/s
- ◆ Additional Instruments: RPM Meter, Soot Meter

**THE ALL NEW  
IMR 2800 P**



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

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 \* IMR 2800 \*  
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 fuel oil ex.lsh.

T-room 29°C  
 T-gas 29°C  
 CO2 0.0 %  
 O2 20.9 %  
 CO 0PPM  
 SO2 0PPM  
 NO 0PPM  
 NOx ++PPM  
 RA ++++ %  
 LAMBDA ++++ %  
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**OPTIONAL ITEM**  
 Soot Meter



**PART-NO.**  
 Soot Meter

RPM Meter



RPM Meter

Represented by:

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