

COMBUSTION GAS ANALYZER

IMR 1400 PS

THE ALL NEW IMR 1400 PS Series

NEW FEATURES OF THE 1400-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 14 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	Nitric oxide
CO	Carbon Monoxide	SO ₂	Sulfur dioxide
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
- 7 Fuels are programmed – 5 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/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 or 12VDC Power Jack

OPTIONAL FEATURES

- ◆ N₂O, NH₃, HC or H₂S measurement
- ◆ CO₂, CH₄/HC and N₂O NDIR sensors available
- ◆ Speed RPM
- ◆ Prepared for gas temperature (0 - 2192 °F / 0 - 1200 °C)
- ◆ Gas sampling probes with different lengths
- ◆ Soot measurement
- ◆ Pitot Tube
- ◆ Gas Flow m/s
- ◆ Additional Instruments: RPM Meter, Soot Meter

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IMR 1400 PS**



PARAMETER	PRINCIPLE	RESOLUTION	ACCURACY	RANGE**	STANDARD
O₂ Oxygen	Electro-chemical cell	0.1 Vol. %	± 0.2 Vol. %	0-20.9 Vol. %	✓
CO Carbon monoxide	Electro-chemical cell	1 ppm	Z	0-2000/4000ppm	✓
	NDIR	0.001 Vol. %		0-10/20 Vol. %	NDIR Optional
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	
HC/CH₄ Hydrocarbons	Pellistor or NDIR	0.1 %	Z	0-100% LEL	
TG Flue gas temperature	NiCr-Ni thermocouple	1 K	± 2 %	-4°F - 2192°F	✓
				0°C - 1200°C	
TA Air temperature	Semiconductor	1 K	± 0.2 K	-4°F / 248°F	✓
				0°C - 120°C	
P Draft	Solid state	0.01 hPa	± 2 %	±40 hPa	✓
NO_x Nitrogen oxides	Calculation	1 ppm	Z	0-NO _x max	✓
CO₂ Carbon dioxide	Calculation	0.1 Vol. %	± 0.2 Vol. %	0- CO ₂ max	✓
CO₂ Carbon dioxide	NDIR	0.01 Vol. %	± 0.2 Vol. %	0-20 Vol. %	
NH₃ Ammonia	Electro-chemical	1 ppm	Z	0-1000/5000 ppm	
N₂O Nitrous Oxide	NDIR	0.001 Vol. %	Z	0-1 Vol. %	
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 4 gas sensors

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

MODEL
 IMR 1400 PS
 Dimensions (inch): 16.7 x 7.3 x 11.4
 (425mm x 185mm x 290mm)
 Weight: 13 lbs. (5.8 kg)

PART-NO.
 IMR 14295

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*****
* IMR 1400 *
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Date      Time
16.10.13  08:55:00
Oil light  -
CO2max    15.5 %
Ref.O2    3 %

GasTemp   23 °C
RoomTemp  23 °C
O2         20.9 %
CO2        0 %
CO         0.000 %
CO (0%O2) -- %
NO         0 ppm
NO (0%O2) -- ppm
SO2        0 ppm
SO2(0%O2) -- ppm

ExAir     -- %
Losses    -- %
Eff        -- %
    
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OPTIONAL ITEM

Soot Meter



RPM Meter



Pitot Tube



PART-NO.
 Soot Meter

RPM Meter

Pitot Tube

Represented by:

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