COMBUSTION GAS ANALYZER
IMR 2800P SERIES

IMR 2800P

IMR 2800-P



- Designed to measure flue gases on
  - Boilers
  - Burners
  - Engines
- Developed to meet the customers need
- High quality combustion gas analyzer using the latest sensor technology
- Easy to use and measures all the important parameters to adjust and optimize the combustion process
- Integrated Printer: each printout includes all information on the display
- Applications: Boilers, Burners, Engines, Turbines, Cars, Trucks, Plants, Chemical Industries, Steel Plants, Refineries, etc.

STANDARD FEATURES

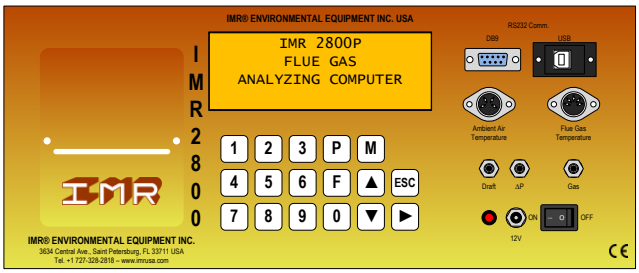
- Portable and very compact combustion gas analyzer housed in a rugged aluminum case
- Simultaneous measurement of
  - O_2 Oxygen
  - CO Carbon Monoxide
  - NO Nitric Oxide
  - SO_2 Sulfur Dioxide
  - NO_2 Nitrogen Dioxide
  - HC/CH_4 Hydrocarbon
  - TG Flue-gas temperature
  - TA Ambient temperature
- Calculation of following parameters according ASME-equations
  - Losses/qA
  - Excess Air/Lambda
  - CO_2 Carbon Dioxide
  - NO_x Nitrogen Oxides
- 23 Fuels are programmed – 4 fuels are programmable
- USB & RS232 interface for real-time uploading of measurements to PC
- Memory for measurements
- Automatic zero calibration
- Integrated self-check program
- Simultaneous display of eight parameters on the illuminated display
- Standard deviation and average value calculation
- Printer with programmable print out cycles
- Unit selection:
  ppm - mg - mg (ref O_2) – mg/kWh
- Gas sampling probe E: – length 250mm (0.8ft.), hose 2.5m (8ft.)
- Standard probe useable in temperatures up to 2192°F / 1200°C
- Rechargeable battery with integrated charger
- 12V DC power jack
- Selectable power supply 120V or 230V

OPTIONAL FEATURES

- Gas sampling probes with different lengths
- High temperature probe usable in temperatures up to 2912°F / 1600°C
- Soot measurement
- Draft measurement
  Optional: Differential draft & Velocity measured in m/s
- HCl, N_2O, CL_2, H_2, NH_3, or H_2S measurement
- CO_2 measured (NDIR sensor)

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IMR 2800-P



IMR 2800P Basic

Parameter	Principle	Resolution	Range
O_2 – Oxygen	Electro-Chemical	0.01 % vol.	0-20.95% vol.
CO – Carbon Monoxide	Electro-Chemical	1 ppm	0-2000/4000ppm
NO – Nitric Oxide	Electro-Chemical	1 ppm	0-2000 ppm
SO_2 – Sulfur Dioxide	Electro-Chemical	1 ppm	0-4000 ppm
NO_2 – Nitrogen Dioxide	Electro-Chemical	1 ppm	0-100 ppm
HC/CH_4 – Hydrocarbon	Pellistor	0.01 % vol.	0-100 % lel
TA – Temperature Gas	NiCr-Ni Thermocouple	1°C / 1°F	-20-1200°C 0-2192°F
TA - Temperature Ambient	Semiconductor	1°C / 1°F	-4-120°C 0-248°F
CO_2 – Carbon Dioxide	Calculated	0.1 % vol.	0-CO_2 max
NO_x – Nitrogen Oxides	Calculated	1 ppm	0-NO_x max
Heat Losses/qA	Calculated	0.1 %	0.0-99.9 %
Excess Air/Lambda	Calculated (EU/US)	0.1 %	1.0-9.0 % / 999.9%
USB	Upload to PC in real-time		

Optional Possible Sensors

CO_2 – Carbon Dioxide	NDIR	0.01 % vol.	0-20% vol.
CL_2 – Chlorine	Electro-Chemical	1 ppm	0-5000 ppm
H_2 – Hydrogen	Electro-Chemical	1 ppm	0-10000 ppm
H_2S – Hydrogen Sulfide	Electro-Chemical	1 ppm	0-200 ppm
HC/CH_4 – Hydrocarbon	NDIR	0.01 % vol.	0-100 % lel
HC/CH_4 – Hydrocarbon	NDIR	1 ppm	0-10000ppm
HCl – Hydrogen Chloride	Electro-Chemical	1 ppm	0-4000 ppm
N_2O – Nitrous Oxide	NDIR	0.01 % vol.	0-1% vol
NH_3 – Ammonia	Electro-Chemical	1 ppm	0-1000/5000 ppm

Optional Possible Features

Soot Measurement	Filter Paper Method		
Draft	Solid State	0.01 hPa	0-40 hPa
Velocity with Pitot tube	Solid State	0.01 m/s	0-80m/s

Other measurement ranges are available upon request
Tolerance ± 2%
Equipped with 8 sensors max

IMR 2800P Series

Model Selection

	O2, CO, CO2, NO, SO2, NO2, HC/LEL, Flue Temp., Ambient Temp., Losses, Excess Air, USB, Memory, 12V DC charging	Soot Measurement, Soot Gas Probe, Soot Filter & Comparison Scale, Draft
	Item #	Item #
IMR 2800P (Basic)	28000-6	28000-6-S

Customized sensor configuration available on request.

Different gas probe lengths available: Select from 250mm, 750mm*, 1500mm*
*additional cost

ASM	Metric
Dimensions: 15”x6.5”x12.4”	Dimensions: 375x165x300mm
Weight: 17lb	Weight: 8kg

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

Optional Equipment

RPM Meter
Tachometer: 180-10,000 RPM
DC: 200mV to 1000V
AC: 200V to 750V



Pitot Tube
Measure flow in m/s



Soot Meter
Measures precise soot number from 0.0 to 9.9
More accurate than a paper scale



IMR Data Software
Upload stored measurements or upload data in real time



Dealer:

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