

IM 1440 F / COF

EXHAUST GAS ANALYSIS ON FORKLIFT TRUCKS

The exhaust gas analyzer **IM1440F/COF** is designed to measure exhaust gases of Forklift Trucks that are powered by Diesel or Gas Engines. According to European regulations it can measure soot on diesel engines and CO on gas powered forklift trucks. Some European regulations require also NOx, therefore this analyzer can be equipped with a NOx sensor as well. The **IM1440COF** is equipped with two CO sensors. One sensor works in the low range and one sensor in the high range.

This new model can also measure the exhaust gas pressure before the soot filter. The measurement of the flue gas temperature, oxygen, carbon dioxide and LAMBDA are helpful for diagnostic reasons and the adjustment of the engines.

A flexible probe, which fits in most exhaust pipes, is inserted into the exhaust pipe and a clamp holds it in place. Measuring exhaust gases is not only important to help control pollutants like CO, but it also helps optimizing fuel efficiency and therefore saving costs.



MEASURED PARAMETERS

■ Oxygen	O2 in Vol.%
■ Carbon Monoxide	CO in Vol.%
■ Nitric Oxide (optional)	NOx in ppm
■ Flue gas temperature	TG in °C
■ Exhaust gas pressure	P in hPa
■ Soot	Filter paper 0.0-9.9

CALCULATED VALUES

■ Carbon Dioxide	CO2 in Vol.%
■ Lambda	

FEATURES

- Rugged case with additional compartment
- Menu navigation (soot, CO measurement or pressure measurement)
- Condensation trap with integrated filter
- 4-lines, backlit LCD Display for simultaneous display of 8 values
- Rechargeable battery with status indicator; up to 6 hours
- Volume controlled soot measurement with soot paper and soot scale
- Exhaust gas pressure
- High speed thermal printer with an easy paper loading system
- Low CO bypass switch valve with purge pump to protect the low CO-Sensor (IM1440COF)
- Diagnostic program
- Gas sampling probe with a flexible sheath
- Manual
- Power cord

OPTIONAL

- RS232 interface
- Memory for 200 measurements
- NO-Sensor

TECHNICAL DATA

PARAMETER	PRINCIPLE	RESOLUTION	ACCURACY	RANGE	STD.
O₂ Oxygen	Electrochemical	0.1 Vol. %	± 0.2 %	0-20.9 Vol. %	✓
CO Carbon Monoxide	Electrochemical	0.001Vol. %	Z	0-10.000 Vol. %	✓
CO Carbon Monoxide	Electrochemical	0.001Vol. %	Z	0-0.200 Vol. %	1400COF
NOx Nitric Oxide	Electrochemical	1 ppm	Z	0-5000 ppm	
TG Flue Temperature	Thermocouple K	1 K	± 2 %	-20/1200°C	✓
P Exhaust Pressure	Solid state	0.1 hPa	± 2 %	0-350 hPa	✓
CO₂ Carbon Dioxide	Calculation	0.1 Vol. %	± 0.2 %	0-CO ₂ max	✓
SZ Soot	Filterpaper				✓

Fuels: Diesel, Natural Gas, Propane, Biogas, Gasoline

Gas sampling probe: Flexible sheath, length 250mm, hose 3,5m

Power Supply: 240V/50Hz; 120V/60Hz; rechargeable battery

Dimensions: IM1440F/COF: 425 x 185 x 290mm

Weight: IM1440F/COF: 5.8 kg

Operating temperature: 0-40°C; 10-90% RH non condensing

IM1440F **Art.-No. 14411**

IM1440COF **Art.-No. 14492**

Other measuring ranges / sensors / fuels upon request

Max. 4 sensors

Z = 0-20% of the measuring range ± 1% of the maximum value
 = 21-100% of the measuring range ± 5% of the displayed value

ACCESSORIES

- ADM4201 / ADM5201 – Multimeter

Digital automotive multimeter to rpm



- CD100A – Gas leak detector

Small, handheld and easy to operate instrument to find combustible gas leaks on gas fired forklift trucks.



- IM900 – Densitometer

Measuring the soot spot.



- IMData – Data transfer software



IM Environmental Equipment Germany GmbH reserves the right to adopt technical modifications without prior notice.