

FGA4500 GAS ANALYZER

FGA4500 Features:

- Quick 2 Hz sampling rate
- Multi-language LCD Display
- Measures up to 5 gases: HC, CO, CO₂, O₂ and NO_x*
- Measures RPM for 2 or 4 stroke engines*
- Calculates AFR and Lambda
- Built-in real-time clock and data recorder
- Internal/External Printer

*Optional Equipment

When you need a reliable gas analyzer that can accurately speed up your emissions, tune-ups, and diagnostics testing, the Infrared Industries FGA4500 is the perfect answer. By offering immediate results, the FGA4500 Gas Analyzer is the *fastest machine* on the market. Certified to BAR and OIML standards, this gas analyzer provides a portable, accurate, and quick solution for every tune-up and automotive mechanic shop.

The FGA4500 measures five gases including Hydrocarbons (HC), Carbon Monoxide (CO), Carbon Dioxide (CO₂), Oxygen (O₂), and optionally Oxides of Nitrogen (NO_x). Simple to operate and simple to maintain in the field, this unit lasts for many years. Economical filters and sensors are replaced in seconds, and the sample cell and optics can easily be cleaned in the field!

The FGA4500 will instantaneously calculate Air to Fuel Ratio (AFR), Lambda (λ), and Grams per Mile (GPM) or Grams per Kilometer (GPK) in real time. When attached to a tachometer, it reads engine speeds to 30,000 RPM. The optional built-in printer documents test results and allows shop owners to print their shop name, address, and other custom header text on the printout for customers' records. You can diagnose fuel-related issues accurately and quickly to provide the service that your customers need.

For those seeking performance tuning, analog outputs allow the connection to a dynamometer, chart recorder or data acquisition console to conveniently display all essential information from the analyzer.



ALL-IN-ONE FAST PERFORMING DIAGNOSTIC TOOL

The FGA4500 measures exhaust gases from two tail pipes and gives you the average reading, or can set up an exhaust dilution. This feature will not only warn you when there is a leak in your exhaust system, it will also alert you when the exhaust probe is not fully inserted in the tailpipe.

Take the FGA4500 on the road with optional battery or by connecting the unit to the cigarette lighter via the 12-volt jack and see how the vehicle behaves in real driving situations. Or, plug it into a standard 100-240 VAC outlet for extended in-shop use. You can use the internal record feature to store all measurements and then download the information to a PC when you return. Instead of spending hundreds or thousands of dollars for a dynamometer or test cell, you can now achieve real-world results right from the driver's seat of the car.

The FGA4500 is a cost-effective, all-in-one performer, which makes it the perfect trouble-shooting tool for your diagnostic needs. Automotive, motorcycle, or any exhaust emissions are ideal applications where detection of up to 5 different gases is required.

COMPANY OVERVIEW

Infrared Industries was the first company to develop a gas analyzer for automotive use. This patented revolutionary analyzer was used exclusively by Sun, Bear, Allen Test, and other companies throughout the 1970s and 1980s. With over 40 years of experience in developing and manufacturing gas analyzers for the automotive, industrial, petroleum, utilities, analytic, and environmental industries, you can be assured that Infrared Industries has the knowledge and the know-how to produce the finest automotive analyzer available today.

FGA4500 Gas Analyzer



The FGA4500 Gas Analyzer features a dual-filtering system that filters both heavy and light contaminants and water, allowing the analyzer to perform well in the harshest environments.

More FGA4500 Highlights:

- Dual exhaust measurement
- Exhaust dilution warning
- Auto-zero for maintaining high accuracy
- Flow indicator
- Pump switch for gas purging
- Custom print-outs with user selectable header text

SPECIFICATIONS

Gases and Ranges

(within 1% full scale accuracy)

HC	Hydrocarbons (n-Hexane)	0-10,000 PPM
CO	Carbon Monoxide	0-10%
CO2	Carbon Dioxide	0-20%
O2	Oxygen	0-25%
NOx	Oxides of Nitrogen	1-5,000 PPM
TACH	Tachometer (Displayed as kRPM = 1,000 RPM)	0-30,000 RPM
AFR	Air to Fuel Ratio	0-50%
λ	Lambda	0-5
GPM	Grams per Mile	
GPK	Grams per Kilometer	

Display

Multi-language - English, Spanish, Arabic
6.5" LCD menu-driven display

Principle of Operation

HC, CO, CO2	Non-dispersive Infrared
O2, NOx	Chemical Cell

Accuracy

BAR-90 certified
Meets BAR-97 performance specifications
Meets or exceeds OIML Class I Gas standards
Canada's AirCare certified

Response Time

Approximately 2 Hz sampling rate

Particle Filter

Coalescent media; field replaceable

Water Filter

True positive screen; field replaceable
Continuous water separation

Interface

RS232 with custom protocol

AC Power

100-240 VAC, 50 / 60 Hz
0.5A / 0.3A max

DC Power

10 - 16VDC,
1.5A nominal, 3.5A max

Weight

9 pounds (4.1 kg)

Size (W x L x D)

13.2" x 10.8" x 6.5"
33.5 cm x 27.4 cm x 16.5 cm

Temperature

2°C to 45°C (35°F to 113°F) Operating
-40°C to 75°C (-40°F to 167°F) Storage

Accessories

Included:

Oxygen sensor
Flexible probe
Handle and sampling hose
AC power adapter
Owner's manual
Quick start guide

Optional:

Internal printer/External printer
NOx sensor
Inductive tachometer
2, 3, or 4 analog outputs 0-5 VDC or 0-10 VDC
2-shelf rolling cart
12 VDC cable
Internal rechargeable battery

Motorcycle Fittings

2, 4 and 6 cylinder manifolds
6mm fitting for Honda, Yamaha, or Kawasaki
10mm fitting for Ducati

Optional Software

PC software for remote display and control
Dynamic Link Library (DLL) for custom software development

Warranty

One year standard
Extended warranty available



Bringing you tomorrow's technology...today

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