



# Independent Hand Held 5 Gas Analyzer or use with MODIS™ Link & VERUS™ Bluetooth Link

**HHGA5A**

## Features and Benefits

**MODIS & VERUS sold  
separately**

- Fully Portable 5 Gas Analyzer  
Go Anywhere, use anywhere
  - 110 VAC & 12v powered
  - The internal rechargeable battery, up to 1 hour use.
    - Ideal for road testing and mobile use
- Measures exhaust emissions for CO, CO<sub>2</sub>, HC, O<sub>2</sub>, NOx and AFR/Lambda
  - Provides an instant assessment of an engine vehicle exhaust and catalytic converter
- MODIS™ & VERUS™ Link for enhanced real time viewing
  - Add a 5 Gas Analyzer function to MODIS™ and VERUS™
  - Set up required with included software on USB stick
  - Gather all the evidence required for effective & accurate vehicle diagnostics on one screen in real time
  - Now see the "Big Picture"
    - Gas Analysis
    - Scope readings
    - Scanner results
    - Component tests
    - Digital graphing function
    - View, graph, save & recall data



CE – Not Required

HHGA5A Country of origin – United Kingdom



# HHGA5A

## More Features and Benefits

- Monitor & Reduce Vehicle Emissions – Improve Driveability & Fuel Efficiency
- The Snap-on HHGA5A is truly Handheld - About the size and weight of a DMM offering True Portability
- Links to MODIS™, VERUS™ and other suitable Bluetooth devices
- There are 255 memory locations in the analyzer to track and print data for the same or many different vehicles
- HHGA5A is compatible with Gasoline, CNG, Propane and DIESEL Fuel types
- HHGA5A is very sensitive and pulls only 1/14th the exhaust volume of competing analyzers. This means no problems with water ingress and pumps last longer
- Service is handled at Crystal Lake Northern Repair- Annual Cal and sensor replacement. Required industry standard.
- Affordable to own – HHGA5A is a proven, trouble-free performer and includes the best support in the industry - toll free unlimited Helpline

**Telephone Help Desk - 888-717-1333**

**8 AM - 9 PM Eastern Time, Monday - Saturday**



**“Plug and Play” simple connection to show 5 gas analyzer readings in “real time” on the MODIS™**



**Use the software provided to link to VERUS™ via Bluetooth® – plus will also link to other suitable Bluetooth Devices**



# HHGA5A

## Specifications

Parameter	Resolution	Accuracy * Vol %	Specified Ranges	Over Range
Gas Measurement				
Oxygen (O2)	0.02%	+/-0.25%    +/-5%	0-21%	25%
Carbon Monoxide (CO)	0.01%	+/- 0.15%    +/-10%	5%	20%
Carbon Dioxide (CO2)**	0.1%	+/-0.5%    +/-10%	0-15%	n/a
Hydrocarbons (HC)	1ppm	+/-20ppm    +/-10%	2,000ppm	30,000ppm
Oxides of Nitrogen (NOx)	1ppm	+/-20ppm    +/-10%	1,500ppm***	5,000ppm***
Pre Programmed Fuels		Gasoline, LPG, CNG****		
Dimensions Weight Handset Probe		1kg / 2.2lb 200mm / 7.9” x 45mm / 1.8” x 90mm / 3.5” 4m neoprene hose & 20 cm (insertion length) stainless steel flexible probe		
Ambient Operating Range		+0 Cto+40 C/32-104 F 10% to 90% RH non- condensing		
Internal Battery Life		120 mins (on standby) from full charge 60 min approximate use time.		
AC adapter		Input: 100-240~ /50-60Hz/300Ma Output: 12vdc /1A		
Bluetooth® range		Approx 50ft (Depending on the environment)		

\*Using dry gases at STP with the instrument not subjected to sudden changes of temperature, pressure, position or severe vibration - CO calibration applies to exhaust gas only with a CO concentration of 5% or more

\*\* Calculated

\*\*\* 5,000ppm is absolute maximum, avoid prolonged reading above 1,500ppm NOx as sensor life may be reduced. NOx Zero may need to be reset by switching the unit on and off in fresh air.

\*\*\*\* With the fuel set for CNG the HC reading is more sensitive to fluctuations than when the fuel is set for Gasoline/Petrol

NOTE:

Unit is designed for pre-compliance emission testing. Unit tested using BAR97 gas, ...however... is not BAR97 approved.



# HHGA5A

## Optional Accessories



Stock Number	Description
HHGA-PB	Plastic case with foam insert
HHGA-5	Infra Red Printer
HHGA-8	Motorcycle Probe

## Kit Contents

Stock Number	Description
HHGA-9	Probe
HHGA-16	AC Charger
HHGA-17	DC Charger
NA	USB Stick w/ application software
HHGA5A-1	Serial Lead
HHGA5A-SP	Soft Pouch
HHGA-11	Filters x5
HHGA-13	Water Trap Bung x2
HHGA-14	Probe Connector x2
HHGA5A-Z	Manual





# HHGA5A

## What potential vehicle problems can be detected?

- Problems in ignition system (Spark plugs, wires)
- Engine compression problems
- Temperature sensor malfunction
- EGR Valve problems
- Dirty air filter
- Obstructed intake valve ports
- Lambda Sensor failure
- Excessive Fuel Consumption
- Misfire
- Rusted exhaust (Internal or external rust)
- Non homologated exhaust (Wrong back pressure)
- Melted catalytic converter
- Worn out catalytic converter
- Obstructed exhaust or catalytic converter
- and much more - ...



### **WARNINGS**



- Wear safety goggles. (users and bystanders)



- Use in well ventilated areas.



- Use safety gloves.



- Read additional safety precautions on pages 594 to 597 in product catalog CAT1100.