# versa06 plus

## EXHAUST GAS ANALYZING SYSTEM


**Simple Touchscreen Operation**

**Easy Charging for Automatic LN2 Refill**

mks inside

**The versa06 plus measuring system offers a wide variety of configuration options, "plus" stands for the combination of FTIR and conventional measuring technology.**

The **IAG nG versa06 plus** combines in a single system the wide range of options offered by FTIR technology with the reliability of standard measurement technology.

The outstanding features of the **IAG nG versa06 plus** include ease of use, large dynamic measurement range, precise gas feed, maintenance friendliness and the flexibility offered by the IAG nG module system.

**Calibration:**
Dependable use of FTIR technology also means specific considerations as to how a measurement device is designed. As with any measurement device that needs to be used flexibly and if necessary, directly in the test cell, the FTIR can only show its true strength if the overall design of the device has been developed accordingly.

This has required developments ranging from a climate control unit for high and fluctuating ambient temperatures to safety switches that safeguard the device from damage in the event of an interruption to the voltage or purge air supplies.

**Analyzers:**
Our aim is to provide the ideal solution for any application and to allow every user to make use of tried and trusted measurement technology. We therefore support the option of integrating all analyzers available on the market and of combining these to achieve a complete customized system.

**Gas Feed:**
Precise gas flow within the device plays a central role in the detection of components that are hard to measure. This system is based on an optimized design, providing for the shortest possible gas flows as well as precise pressure levels and temperature conditioning. Users have the option of disconnecting analyzers individually from the gas flow without affecting the system dynamics, or to make measurements only using the FTIR with a short sampling line via a separate sample gas inlet. The use of a heated sample gas pump renders the system insensitive, within a wide range, to varying pressures at the sampling point.

**Communication:**
The options for communicating with the test cell environment range from AK serial, TCP or remote desktop connection to straightforward bit parallel control. The measurement reading can be outputted via the relevant interface, or via fully customisable analogue outputs where storage of measurement readings can be started or triggered independently by the measurement process. Adaptation to meet customers' needs and providing custom solutions is the norm for us.

**Operation:**
The system is operated either directly using the 17"TFT touch screen or via remote desktop. The user interface of the **IAG nG versa06 plus** is structured clearly and flexibly and offers all the features users have come to expect from advanced control interfaces.

**Sampling:**
The **IAG nG versa06 plus** can of course be combined with any IAG nG sampling module. The options here extend from a simple heated line, serving as a suction feed for the measurement device, to extensive multiple extraction systems with pressure regulators, switching units and high temperature extraction lines. All sampling modules are remotely controlled from the measurement device itself and are also displayed in the device display panel. This means that every parameter such as temperature and switching status for the entire system can be configured and operated from a central location.

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**Service:**
We take care of our customers with individually tailored maintenance solutions. Our offering ranges from full service contracts covering all running costs to servicing by the user who, thanks to the IAG nG modular system, can carry out all maintenance work himself quickly and easily. Capable care and optimum support are 'givens' for our customers.

**Detectable Components Overview:**

| | | | |
|---|---|---|---|
| Acetylene | C2H2 | Hydrogen Sulfide | H2S |
| Acetaldehyde | C2H40 | Isocyanic Acid | HNCO |
| Acrolein | C3H40 | Methane | CH4 |
| Ammonia | NH3 | Methanol | CH40 |
| 1,3 Butadien | C4H6 | m-Xylene | C8H10 |
| Benzene | C6H6 | Nitric Oxide | NO |
| Carbon Dioxide | CO2 | Nitric Oxides | NOx |
| Carbon Monoxide | CO | Nitrogen Dioxide | NO2 |
| Diesel | – | Nitrous Oxide | N20 |
| Dodecane | C12H26 | o-Xylene | C8H10 |
| Ethane | C2H6 | Propanal | C3H60 |
| Ethanol | C2H60 | Propane | C3H8 |
| Ethyl Benzene | C8H10 | Propylene | C3H6 |
| Ethylene | C2H4 | Sulfur Dioxide | SO2 |
| Formaldehyde | CH20 | Toluene | C7H8 |
| Formic Acid | CH202 | Total Hydrocarbons | THC |
| Hydrogen Cyanide | HCN | Water | H20 |

## Advantages

+ Precise Closed Loop Gas Cell Pressure Control
+ Customized Analyzing Modules
+ Short Gas Lines
+ High Dynamic
+ Automatic LN2 Refill
+ Easy Operation and Maintenance
+ Precise Measurement
+ 5 Hz Sampling Rate
+ Flexible Setup
+ Low Operating Costs
+ Fixed Calibration
+ Automatic Leak Check

## Options

- Integration of Additional Analyzers e.g. for HC or O2 Measurement
- Adjustable Sample Gas Flow
- Automatic Refill of Liquid Nitrogen
- Integrated Purge Gas Generator
- Cabinet Air-Conditioning for High Ambient Temperatures
- Gas Removal with Condensate Reservoir
- Integration of Sampling Systems
- Various Pump Performance Available
- Bag Measurement
- Inert Coating
- EPA 1065 Test Procedures
- Special Calibration with 2 % Linearity
- Zirconia Oxygen Measurement
- Lambda Sensor

## Technical Data

| | |
|---|---|
| Dimensions: | 1045 x 610 x 1700 mm |
| Purge Gas: | Nitrogen 5.0 or Treated Compressed Air |
| Analyzers: | FTIR, NDIR, PMA, FID, CLD, TDLS etc. |
| Compressed Air Supply: | 5 bar, Dry and Oil-Free |
| Power Supply: | 400 V / 16 A CEE |