

VMAS™

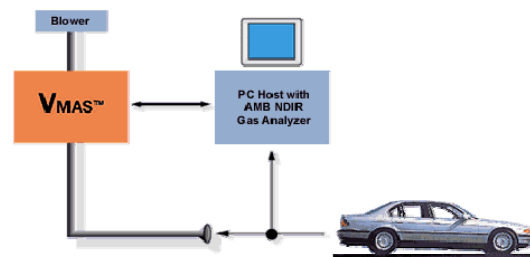
VEHICLE MASS ANALYSIS SYSTEM



Vehicle Mass Analysis System (VMAS™) is a recent breakthrough in vehicle emission testing. VMAS™ allows for a low cost, reliable and accurate means of determining mass in centralized and decentralized vehicle Inspection/ Maintenance (I/M) programs.

The product utilizes an innovative technique for measuring exhaust volume. This technique, coupled with current low cost NDIR gas analyzers, provides for a highly accurate and repeatable mass measurement system suitable for transient, steady state, and even idle test procedures.

Results from independent testing by the NY Department of Environmental Conservation show that VMAS™ displays excellent correlation with costly IM240 transient mass measurement systems. Presently, VMAS™ is the only low cost, accurate, mass measurement system available worldwide.





VMASTM

VEHICLE MASS ANALYSIS SYSTEM

PRODUCT SPECIFICATIONS:

Storage Temperature: -20°C...55°C
Power Consumption: 0.3 Amperes @ 120 VAC (35 Watts)
Warm-up: <10 Minutes

MEASUREMENT RESOLUTION:

Grams Hexane: 10 µg/second
Grams CO: 100 µg/second
Grams CO2: 1,000 µg/second
Grams NOx: 10 µg/second
Correlation: IM240 @ r2 ~ .99
Response Time: Data reported at a rate of 1 Hz
Operating Temperature: 5°C...43°C (41°F...110°F) ambient
Operating Pressure: 800 – 1100 mbar
Relative Humidity: 0 to 90% RH, non-condensing

FLOW METER SUBSYSTEM:

Range: 150 to 500 scfm (calibration dependant)
Accuracy: ±15 scfm
Resolution: 1 scfm
Response Time: <30 seconds to stable T90

OXYGEN SUBSYSTEM:

Range: 0.30 to 22.5 % O₂
Accuracy: ± 0.3 % O₂
Resolution: 0.1% O₂
Drift Long Term: ± 10% over 3 years
Response Time: Approximately 1.2 seconds @20.9% O₂

POWER SUPPLY:

Switch-Mode
Input Voltage: 90-260 VAC 50/60 Hz
Output Voltage: ± 12 VDC; + 5 VDC
Amperage: 1.0 Amperes @ +12 VDC (max)

DISCLAIMER:

Specifications are subject to change without notice.
While due caution has been exercised in the production of this document,
possible errors and omissions are unintentional.