



ONLINE VEHICLE EMISSION MONITORING SYSTEM

FOR DIESEL AND PETROL

About the Product

The automobile exhaust gas tester was developed by our company in accordance with the national standards of ARAI (AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA)

Designed products are divided into automotive exhaust gas tester petrol transient and diesel according to measurement purposes of testing petrol and diesel vehicles at steady state.

VVEM-2210 Vehicle emission monitor is a product designed on the basis customized sensor technology for variable gases that are emitting from the exhaust of petrol and diesel vehicles. It is used to measure the concentration of exhaust gases discharged by vehicle engines including CO, CO2, HC, O2 etc.

Instrument Features

- Developed on the Android platform, with good human-computer interaction and intelligent control;
- Rich interfaces, which can be connected to oil temperature, speed ambient temperature, humidity, pressure and other parameters.



ONLINE VEHICLE EMISSION MONITORING SYSTEM

APPLICATION AREA

- Road inspections and random inspections by the environmental protection department's transportation department.
- Quick inspection of automobile annual inspection test line and exhaust purification device.
- Automotive exhaust research in teaching and research units.
- Automotive manufacturing industry and automotive repair 4S shops.

INSTALLATION CONDITIONS

Install in a location that meets the following installation conditions.

- The equipment is properly grounded. There is no strong magnetic field generated by heat sources or electrical appliances near the installation site (such as motors, transformers).
- If possible, the equipment is qualified for leak detection

DIESEL



PETROL



ONLINE VEHICLE EMISSION MONITORING SYSTEM

Technical Parameters

Measured Gases	Ranges	Technology
Hydrocarbons	0- 10000 ppm	NDIR
Carbon Monoxide	0.00% to 10.0%	NDIR
Carbon Dioxide	0.00% to 16%	NDIR
Oxygen	0.00 % to 21.0%	Electrochemical Cell

SPECIFICATIONS FOR ONLINE VEHICLE EXHAUST GAS ANALYZER

Measuring range	HC: 0 ~ 10000 ppm, CO: 0 to 10.00%, CO2: 0 to 18.0%, & O2: 0 ~ 21.00%
Ambient Temperature	0 ~ 40 °C
Resolution	HC:1 ppm, CO 0.01%, CO2:0.1%, & O2:0.01%
Output Interface	RS-232
Preheat time	Not more than 30 sec
Response time	System response time HC, CO, CO2 O2≤12s
Zero drift	≤ ± 2% F.S. / d
Span drift	≤ ± 2% F.S. / d
Repeatability	HC:≤±2% CO:≤±2% CO2:≤±2%, & O2:≤±3%
Sampling flow	2.0L / min
Relative humidity	20% to 85%
Power consumption	200W

ABOUT SENSORS

O2 Sensor:

An oxygen sensor is an electronic device that measures the proportion of oxygen (O₂) in the gas or liquid being analysed. The most common application is to measure the exhaust-gas concentration of oxygen for internal combustion engines in automobiles and other vehicles in order to calculate and, if required, dynamically adjust the air-fuel ratio so that catalytic converters can work optimally, and also determine whether the converter is performing properly or not.

NDIR Sensors: (CO, CO₂, & HC)

A non-dispersive infrared sensor (or NDIR sensor) is a simple spectroscopic sensor often used as a gas detector. It is non-dispersive in the fact that no dispersive element (e.g. a prism or diffraction grating as is often present in other spectrometers) is used to separate out (like a monochromator the broadband light into a narrow spectrum suitable for gas sensing. The majority of NDIR sensors use a broadband lamp source and an optical filter to select a narrow band spectral region that overlaps with the absorption region of the gas of interest.

CONTACT US

- ▶ Plot No. 21 & 22, Block No. 24, Phase – 4, AutoNagar, Guntur 522 001, Andhra Pradesh India
- ▶ Phone : +91 7382708685
- ▶ Email: info@vasthi.com

