

PUC Instruments

Leading PUC Instruments manufacturer since 1989. Multi gas analyzer and Diesel smoke meters is in use across the country with various vehicle mfrs garages, private puc centres, and petrol pumps of all oil companies such as HPCL, BPCL and IOC.

Multi Gas analyzer for Petrol, CNG and LPG Vehicle emission measurement:



Diesel smoke meter for Diesel vehicle emission measurement



Features:

- Micro Controller Based
- Alphanumeric LCD display with back light for day & night operation
- User Friendly keyboard & display interaction
- Built in 24 column printer for hard copy of the report
- Auto zero facility
- Easy calibration check
- Computer Interface provided
- Can be up graded to RPM Measurement by ripple technology
- Work on 12 V battery and 230 VAC

Operating Principle:

Meters Smoke Meter model NPM-SM-111B is based on the principle of absorption of light, which is indicative of the quality of smoke. A Green LED driven by a pulsating constant current source emits a light beam having peak spectral intensity between 550 to 570 nm wave lengths. The beam passes through a smoke cell and on to a silicon photo detector which continuously senses the intensity of light incident on it and converts it into an electrical signal. This signal is further processed by precise signal handling circuits. This all solid-state design ensures high stability. The output of this stage is given to a microprocessor for further processing to convert it into suitable units including Percentage capacity and absorption coefficient (K).

Smoke sampling is done on free cone principle. Smoke is measured in a smoke cell which has an effective length of 0.4 meters.