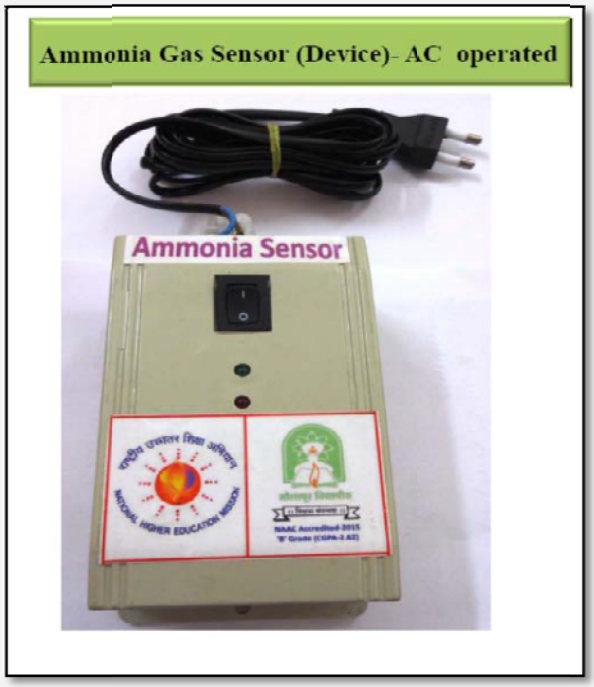
Ammonia (NH_3) Gas Sensor Device

The Ammonia (NH_3) gas sensors use a small thin film which detect the leakage of ammonia gas and give the indication by making on the LED and small beep of buzzer. They are sensitive for a range of gasses and are used indoors at room temperature.

It uses a CMOS technology having operating current 8.5μA @32 KHz, 2.0V typically.

Ammonia Gas Sensor is an air quality sensor for detecting a wide range of gases. Ideal for use in office or factory. Ammonia gas sensor has high sensitivity to Ammonia. It is with low cost & particularly suitable for Air quality monitoring application.

Cost: Rs. 400/-



Cost: Rs. 600/-

Ammonia Specific

Rapid response to ammonia

Easy Maintenance

Quick and easy calibration

CMOS Technology

Automatically adapt to its environment and provide accurate and reliable performance under hazardous condition

General Description

The ammonia sensor consists of a pair of polarized electrodes isolated from the ambient air by a gas permeable membrane. As ammonia diffuses into the sensor, a reaction occurs, generating a current linearly proportional to ammonia gas concentration. Unlike many other ammonia sensors, this gas diffusion detector exhibits excellent zero and calibration stability over long periods of time. This sensor can provide direct input to the analog channel of controller and give digital output in the form of LED and buzzer.

Standardization & Calibration of Ammonia Sensor

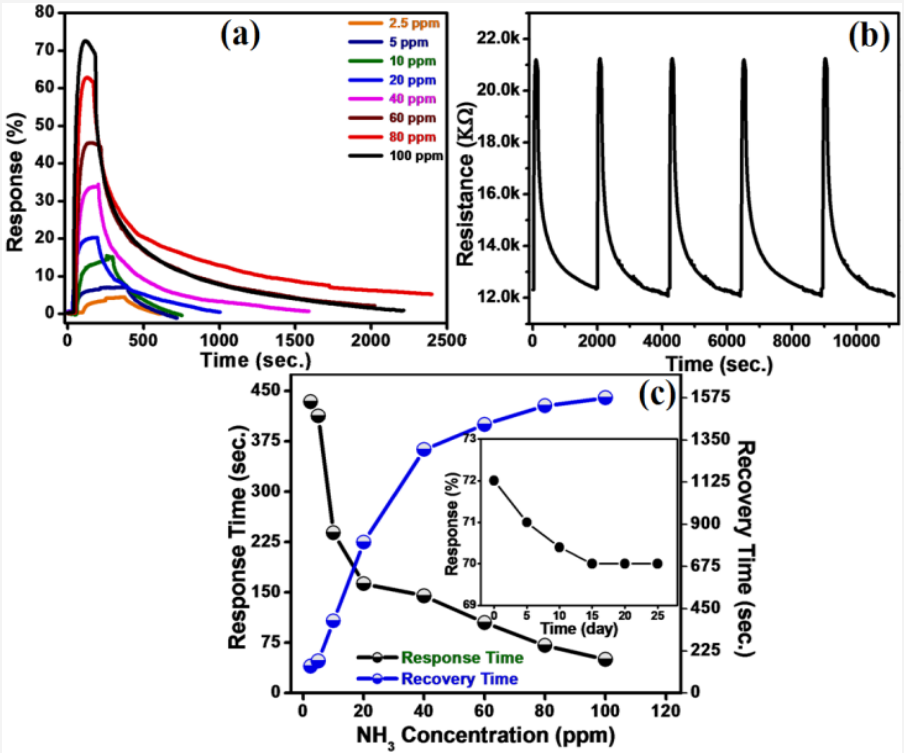


Fig.: (a) Response to different NH_3 concentration, (b) Reproducibility and (c) Response-recovery characteristics of flexible sensor (inset shows stability of the sensor).

Features of Ammonia GAS Sensor

- High sensitivity to Ammonia
- Stable and Long Life
- Detection Range: 2.5 - 1000 ppm NH_3
- Input voltage for AC operated system:230V AC
- Input voltage for DC operated system:9V DC
- Operating Voltage: 5.0V
- Circuit voltage: 5V
- Current :1 mA
- Load resistance: 20K
- Operating temperature: -5 ^{o}C to 50 ^{o}C
- Response time: 27 second
- Stability : 97 %
- Long life and low cost

Application of Ammonia GAS Sensor

- Laboratory
- Domestic air pollution detector
- Industrial air pollution detector
- Portable air pollution detector
- Bakeries
- Beverage, Bottling Plants
- Chemical manufacturing
- Coolers
- Food processing
- Fruit, Vegetable processing
- Storage Freezers

Contact Information

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