CONTINUOUS EMISSION MONITORING SYSTEM (CEMS)

Model No.
CEMS-207

UPC Instruments Pvt. Ltd.

An ISO 9001:2015, 14001-2015 CE & TÜV SÜD Certified Company

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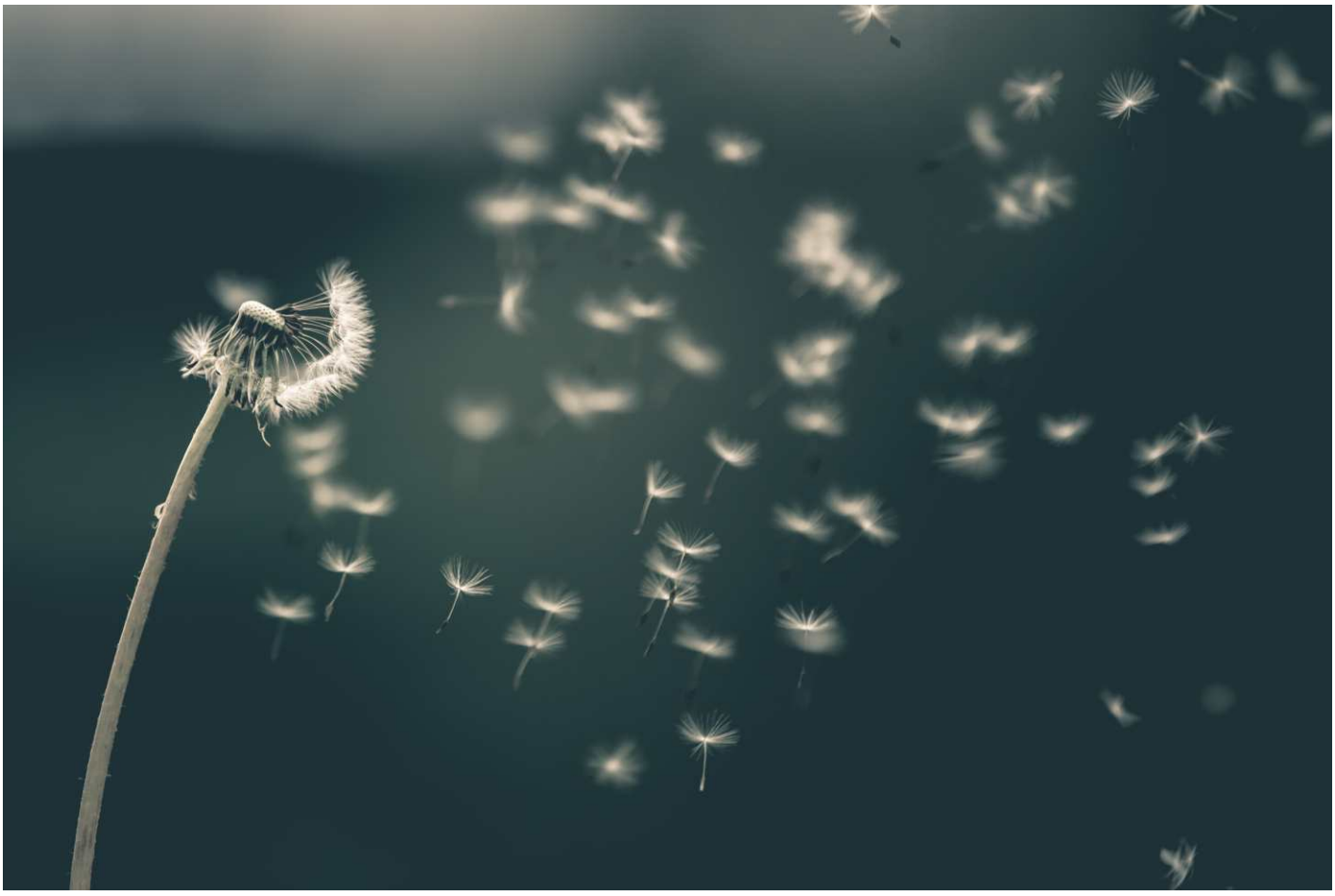


- 2 Million people die each year from breathing tiny particles and pollutants present in air.
- PM 10, PM 2.5 and PM 1 can penetrate lungs and bloodstream causing heart disease, lung cancer, asthma etc.
- We provide Continuous Emission Monitoring Systems (CEMS) for PM level monitoring in stacks.
- We also undertake storage of stack data through our data loggers and upload data on servers as per CPCB and SPCB guidelines.

01 Product Overview

In recent years Online Emission Monitoring Technology has received attention and interest in context of providing accurate and continuous information on particulate matter/ gaseous emission from stacks. There are already commercially available systems for monitoring parameters such as HCL, SPM, CO, O2, CO2, NOx, SOX, etc. The Continuous Emission Monitoring (CEMS) System comprises of the total equipment necessary to determine the concentration of gaseous emission and/or particulate matter concentration and/or emission rate using analytical measurement. Continuous Emissions Monitoring System (CEMS) consist of a series of gas analyzers for various air pollutants being monitored. Analyzers are integral to your CEMS as they measure gases including NOx, SOx, CO, CO2, O2, SPM, and more.

02 Parameter to be measured

Continuous emission monitoring system measures multi-parameters include:

SPM
SOx
NOx
CO
CO2
O2

NOTE- We can provide parameters according to Client's requirement.

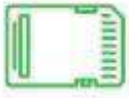
03 Features

- Data Uploading Time 1 Min to 30 Min.
- Online Remote Calibration (Optional).
- Online System Failure Alarms (Optional).
- Build in Cloud Connector for Online Data Transfer.
- Password protection for Users and Pollution Board.
- High Durable
- Low maintenance
- Touch Screen Display
- Real time response with CEMS

Wi-Fi Connectivity

Touchscreen Monitor

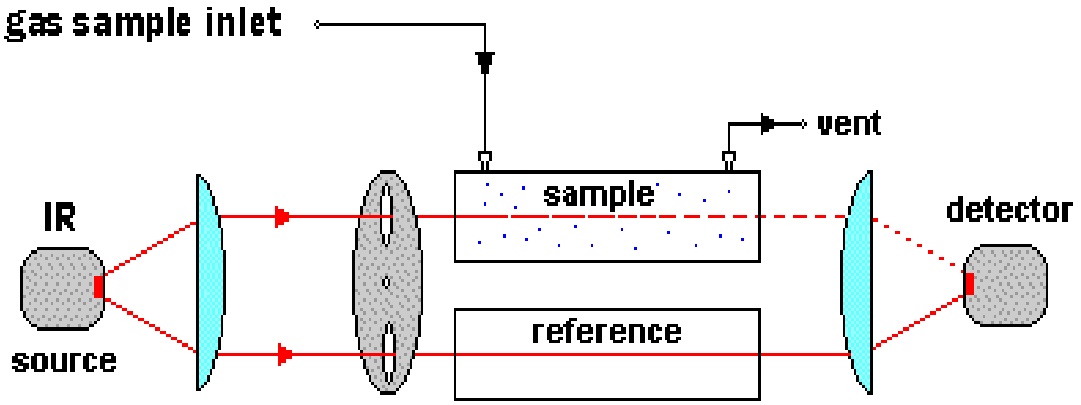
Detects Toxic Gases



Micro SD Card Storage

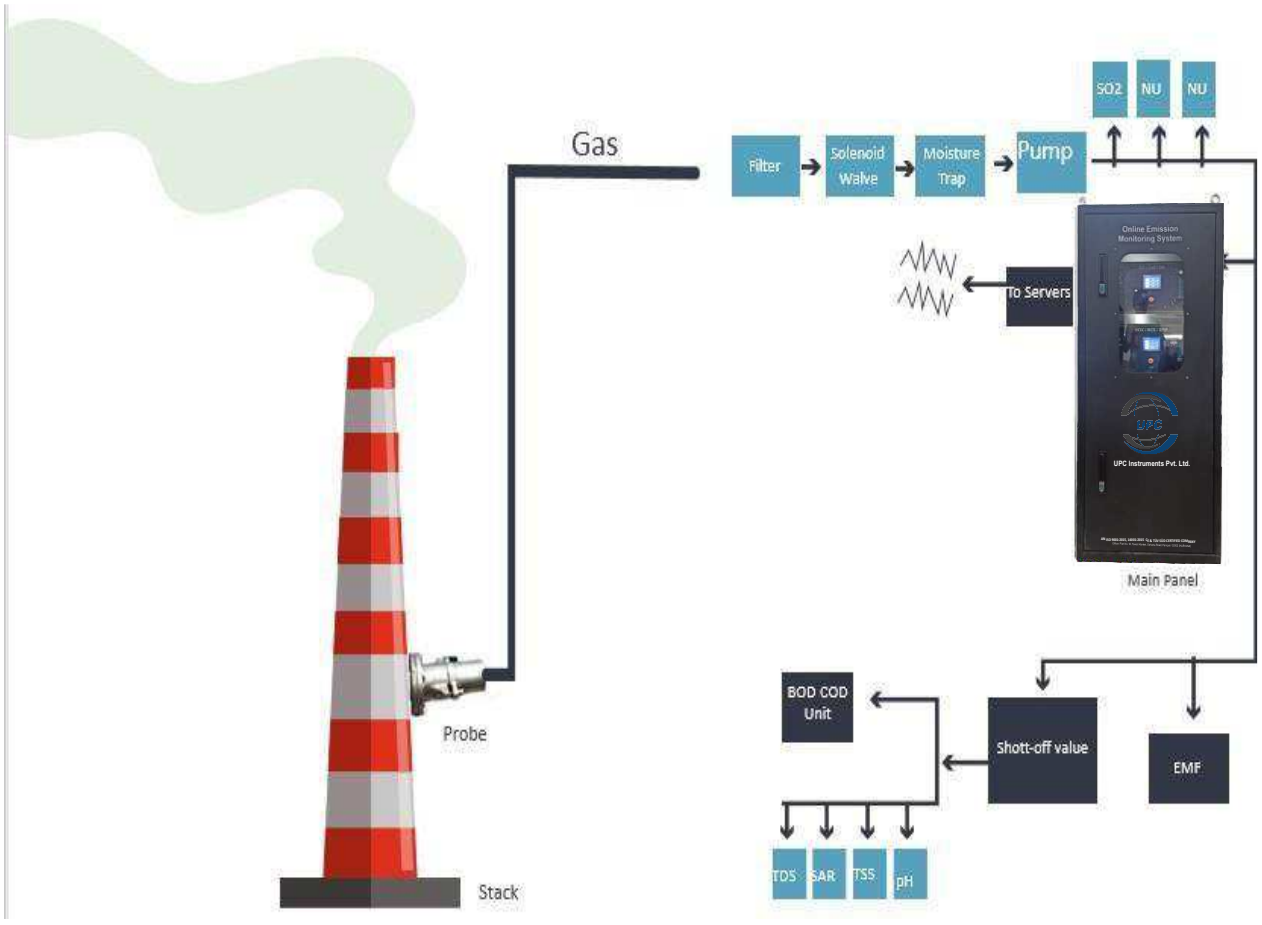
04 Working Principle

The Non Dispersive Infrared (NDIR) detection method is based upon the absorption of infrared radiation at specific wavelengths as it passes through a volume of sample. Non-Dispersive Infrared (NDIR) techniques for the measurement of various gases rely on the energy absorption characteristics of a particular gas in the infrared region.



In a simple NDIR instrument, Infrared energy passes through two identical tubes and falls on a detector. The first tube is the reference cell and is filled with a non-absorbing gas such as nitrogen. The second tube is the measurement cell and contains the gas sample to be analysed.

05 Installation Diagram



06 Technical Specifications

S.NO	Parameter	Technology	Measuring range	Operating temperature	Resolution
1	SPM	NDIR	0-800 µg/m3	10 -40°C	1 µg/m3
2	SOx	NDIR	0-5000 PPM	0 -45°C	1 PPM
3	NOx	NDIR	0-5000 PPM	0 -45°C	1 PPM
4	CO	NDIR	0-5000 PPM	10 -45°C	1 PPM
5	CO2	NDIR	0-25 %	10 -45°C	0.01 %
6	O2	NDIR	0-25 %	0 -45°C	0.01 %

07 Applications

continuous emission monitoring system (CEMS) is the total equipment necessary for the determination of a gas or particulate matter concentration or emission rate using pollutant analyzer measurements and a conversion equation, graph, or computer program to produce results in units of the applicable emission.

WARRANTY

All meter are warranted against any manufacturing defect for a period of 12 months from date of supply, provided the meter has not been misused, damaged, installed for services it is not recomended or the seal has been tempered with. The company shall be liable to furnish part/ parts thereof or full water meter as the company may deem fit.

UPC INSTRUMENTS PVT.LTD.

AN ISO 9001:2015, 14001-2015 CE & TÜV SÜD CERTIFIED COMPANY

Office: Plot No. 18, Towel Market, Gohana Road, Panipat-132103 (HARYANA)

Manufacturing Unit: Plot no.125,Near Tehsil, Dinger Majra Road, Gharaunda, Karnal-132114 (HARYANA)

✉ : info@unitechmeter.com ✉ : ho@unitechmeter.com 🌐 : www.unitechmeter.com