Measuring Principle

VOCs gas analyzer is using high temperature method, there is a heating chamber inside for analytic gas path. By adopting air bath heating method, it can make chromatographic column and gas paths before of after it in high temperature condition.

VOC gas analyzer is using FID principle to analysis. This technology is a gas separation technology that multi component gas mixture pass through special chemical fillings of chromatographic column, then effectively separated while flow out of the column.

FID technology is one of the effective methods for detecting organic gas of low concentration. After been separated from the column, the gas continuously delivered into the FID detector by the carrier gas. Under high temperature ionization of FID detector hydrogen flame, the gas molecular bond is opened and release the free ions and electrons. Under high voltage electric field of FID detector release electrons move to one electrode of the electric field, and generate signal current from the measurement circuit which is related to the quantity of gas components into the detector.



Features

- Analyzer automatically blows the chromatographic column to speed up the component sieving and analysis
- Gas line is inert processed to avoid the adsorption and residue of samples on the pipe wall
- Configuration supports multiple detectors which can be used for complex sample analysis at the same time

Application

- Crude processing
- · Textile and dyeing
- Chemical and pharmaceutical
- Metal Smelting
- Food & Drinks Industries

Specification

Principle	FID
Measuring Range	0.01ppm ~ 1000ppm (by methane)
Range Drift	≤ 3.0% (4h)
Linearity	< 4% above measurement Range
Ambient Temperature	-5°C to 40°C
Input flow of Sample Gas	200mL/min
Size	500mm x 500mm x 210mm
Display	Touch Screen LCD
Comm. Output	10/100M ethernet port, RS232
Comm. Protocol	RS485 Modbus RTU / GSM / WIFI
Power Supply	230VAC, 50/60Hz, 900W
Resolution	0.001 ppm
Power Consumption	500W

