

Infrared Gas Analyzer

ATP8900TP-G

Features

- Spectral Range 6000-500cm⁻¹
- High resolution 1cm⁻¹
- Automated real-time monitoring of gas concentrations ppb
- Patent 9.8m gas cell heat up to 191°C
- Qualitative and quantitative 30 components of gases concentration at the same time
- Build-in battery for continuous 3 hours at site

Application

- Liquid test
- Accurate Quantitative Measurement
- Qualitative analysis of organic solutions, organic solvents, and various oil products
- Quantitative analysis of impurities, aqueous solution system, etc

Description

ATP8900TP-G is a portable Fourier transform infrared gas analyzer that integrates anti-vibration interferometer, moisture-proof ZnSe beam splitter, electrically cooled high-sensitivity MCT and other optical devices with a 9.8-meter long optical path gas cell, which can analyze multiple gases on site. Rapid analysis of various gas components with sensitivity reaching ppb level. ATP8900TP-G can be used to monitor waste incineration emissions, coal-fired power plant emissions, combustion gas emissions, chemical gas leaks, flue gas analysis and other inorganic gases that are toxic and harmful to the environment. It can also be used to measure various volatile organic gases such as VOCs or Measure the purity of the gas.



1. Parameter

Items	Parameters
channel	automatic switch
Spectral Range	6000-500cm-1
Spectral Resolution	≤1 cm-1
Wavenumber Accuracy	≤0.01cm-1
Interferometer	Self-developed highly stable cube-corner interferometer
Beamsplitter	Moisture-proof beam splitter for zinc selenide (ZnSe) in mid-infrared
Detectors	High-sensitivity TEC-MCT detector with built-in ADC
Infrared light source	Long life Mid-infrared ceramic light source
Laser	Solid-state laser (lifetime >10 years)
Operating temperature	- 10°C to +40°C
Software	Full English language processing software with intelligent one-click direct access to measurement and storage functions.
more Functions: Infrared spectral measurement function, spectral data pre-processing function, spectral map fast comparison function, user-built standard spectral library function, quantitative analysis function, intelligent spectral map recognition function, automatic report generation and printing function, etc.	

2. System technical features:

Anti-vibration interferometer, permanent alignment of optical path, fully gold-plated mirror, 30-degree optical compensation design, suitable for on-site inspection

Using the latest electric cooling MCT detector, directly outputs digital signals

The infrared light source is a ceramic light source with a temperature of 1550K

A variety of infrared reference spectral libraries can be used, such as: more than 3000 qualitative analysis gas spectral libraries

The multi-reflection long optical path gas cell can analyze gas molecules down to the ppb level; it can search for unknown gas components and is suitable for analyzing various gases in the on-site environment. The fully gold-plated mirror is coated with a special anti-corrosion layer and can be used in various harsh environmental gases.

Quantitative gas can display the concentration values of more than 30 components at the same time

The infrared host computer is connected to the laptop through an "Ethernet" network card without any restrictions. The computer can remotely control, sample and process data, and share data in real time, effectively reducing the risk of data analysts being injured by dangerous goods.

Built-in battery, can provide continuous power supply for more than 3 hours when used at room temperature.

3. System technical parameters:

Measurement principle	Fourier transform infrared spectrometer
Performance	Can measure up to 30 gases simultaneously
Zero point drift	less than 1% of the measurement range within 48 hours
Linearity	less than 1% of measurement range
Response time	T90 less than 90 seconds
Operating temperature	0-40 degrees
Storage temperature	-20-50 degrees
Battery life	more than 3 hours
Charging power supply	220V/50Hz
Volume size	41cm×33cm×22cm
Weight	14Kg
Carrying method	portable and backpack

4. Gas cell parameters:

Structure	Multiple reflection White Pool, fixed optical path 9.8 meters, can be heated to 180 degrees
Material	Aluminum alloy pool body
Mirror	multi-layer gold plating plus rhodium or magnesium fluoride anti-corrosion layer
Volume	0.4 liters
Gas flow	1.65 liters/minute