

## High Temperature FTIR Gas Analyzer ATP8900-G

### Features

- Compact size
- The optical path is permanently aligned and has excellent stability
- ZnSe material beam splitter and window
- Configure gas cells with different optical path lengths
- Heated gas cell and temperature controller

### Application

- Environmental emergency monitoring
- Industrial process analysis and control
- Flue emission gas testing
- Labor hygiene on-site monitoring
- Catalytic conversion science research
- Garbage incineration and combustion emission gas monitoring

**Especially suitable for:** simultaneous analysis of multiple components of measured gases, high temperature, high humidity, complex and harsh test environments where the measured gas components are complex

### Description

ATP8900-G is a FTIR gas analyzer designed by Optosky for low concentration gas applications. This analysis system is suitable for application sites such as waste incineration, environmental protection, and online gas monitoring; it can also be used in universities and research institutes to characterize catalyst gases.

For accurate and repeatable measurements in everyday work, the ATP8900-G features a nearly maintenance-free optical system, while the proven interferometer design ensures unparalleled reliability. With fully integrated and reliable universal sampling capabilities, easy measurement and a wide range of accessories, the ATP8900-G is the ideal instrument of choice for both laboratory and field testing environments. ATP8900-G leads the infrared spectroscopy market with an attractive price/performance ratio and high performance.

The compact gas analyzer integrates a long optical path gas cell. Yingsa Company developed and designed a dedicated coupling chamber that perfectly organically combines the spectrometer with the gas cell, temperature controller, thermocouple, radiator, etc. The optical path is simpler and almost Disturbed by the external atmosphere.



## 1. Parameter

| Item                | Specifications                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Spectral Range      | 5000-500cm <sup>-1</sup>                                                                                                                                                                                                                                                                                                                                                      |
| Spectral Resolution | ≤1cm <sup>-1</sup>                                                                                                                                                                                                                                                                                                                                                            |
| Wavenumber Accuracy | ≤0.01cm <sup>-1</sup>                                                                                                                                                                                                                                                                                                                                                         |
| Interferometer      | High-stability Cube Mirror Michelson Interferometer, service life is more than 10 years                                                                                                                                                                                                                                                                                       |
| Beam Splitter       | Mid-infrared zinc selenide (ZnSe) moisture-proof beam splitter                                                                                                                                                                                                                                                                                                                |
| Detector            | Moisture-proof high-sensitivity MIR detector with built-in ADC                                                                                                                                                                                                                                                                                                                |
| Source              | Long life mid-infrared ceramic light source, 1550K                                                                                                                                                                                                                                                                                                                            |
| Laser               | Solid-state laser, service life is more than 10 years                                                                                                                                                                                                                                                                                                                         |
| Gas Cell            | Multiple reflection gas cell with pathlength 5 meters and volume is 200mL. Mirrors are gold coated and anti-corrosive. The diameter of input and output is 6mm. The gas cell can be heated to 200°C.                                                                                                                                                                          |
| Software            | The English version of the processing software under the Windows 10 operating system includes: infrared spectrum measurement function, spectral data preprocessing function, spectrum rapid comparison function, user-built standard spectrum library function, quantitative analysis function, automatic deduction of diamond/CO <sub>2</sub> absorption peak function, etc. |
| Database            | Equipped with many gases quantitative models, such as CO <sub>2</sub> , CO, NO <sub>2</sub> , NO, NH <sub>3</sub> , SO <sub>2</sub> , HF, H <sub>2</sub> O etc. the software can setup new models according to the different concentration of gases                                                                                                                           |
| Size                | 590 mm * 430 mm * 176 mm (Host)                                                                                                                                                                                                                                                                                                                                               |
| Weight              | 33 Kg                                                                                                                                                                                                                                                                                                                                                                         |