

FT-IR Spectrometer

ATP8900-RT

Features

- Online qualitative and quantitative liquid analysis
- Just a drop of liquid for measurement liquid concentrations ppm
- Liquid cell rotation with selectable four optical path length of 30 μm , 50 μm , 100 μm , 200 μm
- Easy to clean samples
- Quick to obtain spectra with high sensitivity and high SNR

Application

- Quantitatively and qualitatively measure various types of liquids to meet the liquid testing needs of different application fields.

Description

The newly designed ATP8900-RT rotating transmission infrared liquid analyzer by Optosky perfectly combines the high light flux of the transmission method and the simplicity of sample preparation of the ATR method, and the rotating head of the analyzer can be configured with up to 4 different optical paths. The optical window and a cleaning station greatly meet the testing needs of different customers.

When performing liquid quantitative testing, only one drop of liquid can meet the measurement requirements.



Parameters	
Spectral Range	7800~350 cm ⁻¹
Resolution	< 1 cm ⁻¹
SNR	40,000 : 1 1 min sample measurement, 4 cm ⁻¹ , peak-to-peak
Wavenumber Accuracy	< 0.01 cm ⁻¹
Wavenumber Precision	<0.1 cm ⁻¹
Modules	Optional measure modules for replacement
Built-in Li-battery life	>8 hrs
Power	AC220V / 50Hz
Modules	plug- and-play
Analysis time	About 5 seconds
System	Windows 10
Software	<ul style="list-style-type: none"> ● Infrared control, ● spectrum processing, ● Quantitative analysis of multi-component samples, ● Auto inspect software, ● Advanced macro programming software <p>online continuous monitor of optical components, say laser light source, sensor, beam splitter so as to ensure best working status Auto remove air water and CO2</p>
GMP software	In full compliance with GMP, 21CFR 11

1. Built-in Modules & Attachments

FT-IR spectrometer is widely applied to IR measure modules of solid transmission, ATR reflectance, and diffuse transmission etc.

- **Solid Transmission**

1. Many solid powder press
2. Thin film Quantitative analysis
3. Heating press module quantitative analysis
4. Transparent IR materials of various glasses, Jades, crystal materials, and material properties change

- **Solid / Liquid Attenuated Total Reflectance (ATR)**

1. Many powder sample without press for direct measure
2. Irregular shape sample of non-destructive measure without press
3. Many polymer, fiber, thin film, and high polymer sample
4. Many O ring, rubber sample
5. Many others difficult to measure by transmission

- **Liquid Transmission**

1. Seal liquid cell qualitative analysis organic solution, VOCs
2. Disassemble liquid cell available in change optical length for quantitative analysis
3. Many lubricant oil quantitative analysis
4. IR window film forming liquid film for qualitative analysis

- **Gas Cell**

1. Glass or Stainless steel gas cell can inlet directly with select temperature control and optical length of 1.5 cm, 3 cm, 5 cm, 7 cm etc fit to high concentration gas
2. Multireflectance gas cell of stainless steel, temperature control and optical length of 50 cm, 100 cm, 5 m fit to low concentration gas
3. Corrosion resistant gas cell can customize anti-corrosion materials gas cell eg HF gas measure

Advantages To Monitor Gas

- No necessary to adjust cell in front of sample, Nitrogen calibration improves efficiency
- Permanent vertical interferometer module provides excellent shock and temperature resistant ensure reliability
- ZnSe-made beam splitter and mirror seal dehumidifying designed to operate in the field and at site
- Gas cell optical path allow customize by user own base on their specific concentration.
- Built-in temperature control system to keep the constant performance under different conditions
- Optional quality & flow controller for high concentration inlet sample and linearity

calibration

- Built-in GTG sensor (optional MCT) stand severe environment