OPTOSKY
Spectroscopy Solutions

Datasheet

FT-IR Spectrometer | ATP8900-RT

Features:

- Flexibility: Combines the high light flux and the ATR method is simple; up to 4 optical windows with different optical lengths and 1 cleaning position, which greatly meets the testing needs of different customers.
- Sensitivity:Designed with high luminous flux ZnSe crystal,which has excellent sensitivity.
- Simple:Easy to operate and simple to clean.
- High sensitivity in transmission： The optical path of 100 microns is the most commonly used, if converted to the number of reflections of ATR, then this optical path is equivalent to 50 reflections of the ATR crystal @1000cm-1

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.

Product data information is current as of publication data.
Products conform to specifications per the terms of Optosky Standard warranty.

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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	● Infrared control, spectrum processing, ● Quantitative analysis of multi- component samples, ● Auto inspect software, ● Advanced macro programming software ● 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
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

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- **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 1.5cm, 3cm, 5cm, 7cm etc fit to high concentration gas
  2. Mulit-reflectance gas cell of stainless steel, temperature control and optical length of 50cm, 100cm, 5m fit to low concentration gas
  3. Corrosion resistant gas cell can customize anti-corrossion 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

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。

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