

FT-IR Spectrometer

ATP8900Plus-PH

Features

- High sensitivity optical system, Use Cube-corner Michelson interferometer combined with patented fixing mirror alignment technology
- High stability modular partition design, offering higher ability of deformation resistance and less sensitive to vibrations and thermal variations
- Intelligent multi-sealed moisture-proof design, Multiple sealed interferometers, large-capacity desiccant cartridge with visible window and easy replacement structure
- Innovated integration electronic system
- Good anti-electromagnetic interference capability
- High intensity IR source assembly, adopts a reflex sphere design to obtain even and stable IR radiation.

Application

- Identification of raw ingredients in the pharmaceutical industry.
- Identification of industrial materials (rubber, plastics, fibers, etc.)
- Functional group detection
- Characteristic group detection

Description

ATP8900Plus-PH FT-IR SPECTROMETER is a product with high quality, low-cost and advanced technology. It has major breakthroughs in appearance, software, communication methods, high-precision A/D and product functions.

It is based on the Microsoft Windows operating system, can be in a full range of 32 and 64 bit Windows system (Windows XP, Windows 7, Windows 8, Windows 8.1 and Windows 10, etc.). The purpose of the design is to make the collection and analysis functions of infrared spectrum to be easy to learn, easy to use, flexible and efficient.

The product has a real-time instrument status diagnosis function, real-time monitoring of the instrument's working status, performance indicators and communication status, to ensure that the instrument is always in a stable working state.

At the same time, the product has a variety of detector options: in addition to the constant room temperature pyroelectric detector, it can also be equipped with a temperature-stable pyroelectric detector and a semiconductor cooling MCT detector to meet the need of different customers.



1. Parameter

ATP8900Plus-PH		
Interferometer	Cube-corner Michelson interferometer	
Beam splitter	Multilayer Ge coated KBr	
Detector	High sensitivity pyroelectric module (standard)	Temperature stabilized module, MCT detector (optional)
IR Source	High intensity, long lifetime, air-cooled IR source	
Wavenumber Range	7800cm ⁻¹ ~350cm ⁻¹	
Resolution	0.85 cm ⁻¹	
SNR	Better than 20,000:1 (RMS value, at 2100cm ⁻¹ ~ 2000cm ⁻¹ or 2100cm ⁻¹ ~ 2200cm ⁻¹ , resolution: 4cm ⁻¹ , detector: pyroelectric, 1 minute data collection)	
Wavenumber Accuracy	±0.01 cm ⁻¹	
Scanning Speed	Microprocessor control, different scanning speed selectable.	
Software	MainFTOS Suite software workstation, compatible to all version Windows OS	Various specialized functional software modules (optional)
Communication	Ethernet interface & WIFI wireless communication	
Data Output	Standard data format, report generation and output	
Status Diagnosis	Power on self-check, real-time temperature and humidity monitoring and reminders	
Certification		FDA 21 CFR Part11 compliance IQ/OQ/PQ (Optional)
Environment Conditions	Temperature: 10°C~ 30°C, humidity: less than 60%	
Power Supply	AC220V±22V, 50Hz±1Hz	AC110V (optional)

Dimensions & Weight	490×420×240 mm, 23.2kg	
Accessories	Transmission sample holder (Standard)	Optional accessories such as gas cell, liquid cell, Defused/Specular Reflection, single/ multi reflection ATR, etc.