

# Datasheet

## **FT-IR Emission Spectroscopy**

## **ATP8900-RE**

#### Features

- Compact light path;
- less radiation loss;
- Automatic light path switching ;
- 1-10 micron medium-near infrared band ;

#### Application

- Study the emission profile characteristics of the material
- Calculate the firing rate of the material
- The emission spectrum of mugwort column combustion
- Emission spectra of the ceramic sheet at different temperatures
- Testing of various physical therapy instruments in medical devices
- (Near) infrared light source test
- Spectral testing of ultra-high temperature samples
- Emission measurements of the plasma
- Emission research of human body acupoints
- Emission measurement of glass and building materials
- Emission measurement of solar energy collector tubes
- Emission measurement of various fabrics

### Description

ATP8900-RE is a Fourier transform infrared spectromete. The spectrometer emission integrates a specialized emission platform and be installed with various emission can accessories and reference blackbodies to meet the characterization needs of different materials at different temperatures. The main unit of the spectrometer is equipped with dual detector positions, making it convenient for users to switch between multiple detectors for measurement at any time. Flexible light path design, users can choose focused light path or parallel light path to suit different samples. In addition, ATP8900-RE can also replace the internal optical components to expand the measurement spectrum to the near-infrared band emission to meet the measurement of near-infrared light sources.



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## Parameter

Physical parameters		
	Standard range $500 \sim 5000$ cm-1	
Spectral range	(Optional 400-7500cm-1, 400-10000cm-1, or extended to near infrared	
	12500 cm-1)	
Spectral resolution	Better than 2 cm-1, typically used in 8 cm-1	
measurement method	Place samples at focus point, choose different temperature controllers or	
	blackbody working conditions:	
	Working temperature: -5 $\sim$ 40°C; Working humidity: 0 $\sim$ 100%R.H.	
Power	100~240VAC, 50~60Hz, 20W;	
weight	12kg	
size	44 cm×33 cm×18cm(W×D×H; Includes launch baffle)	
Product configuration		

### **Product configuration**

Interferometer	Advanced Michelson interferometer, permanent Optical path collimation,
	excellent stability
solid-state laser	Stable performance and service life of more than 10 years
emission source	Focus light path, sample or heat source or blackbody
beam splitter	ZnSe material beam splitter and ZnSe window prevent optical components
	from deliquescence (KBr, quartz beam splitter optional)
Detector	Built-in dual detector positions, you can choose normal temperature
	detector or low-temperature MCT, indium gallium arsenide, realize
	automatic switching by software
Optical path design	Dedicated emission light path design, reduces radiation loss and increases
	radiation flux
launch accessories	Various accessories can be customized to meet actual testing needs