# Lab Online FTIR Analyzer Fourier Transform Infrared Spectroscopy Equipment

# **Basic Information**

Place of Origin: CHINA
Brand Name: JINSP
Certification: CE ISO9001
Model Number: IT2000CE

 Minimum Order Quantity:

• Price: Negotiable

Packaging Details: Customized Packaging
 Delivery Time: 60-80working days

• Payment Terms: TT

Supply Ability: 20 PCS/60-80 days



# **Product Specification**

• Spectral Range: 500-5000 Cm-1

• Resolution: 2 Cm-1, 4 Cm-1, Or 8 Cm-1

• Unit Dimensions: 510×300×250mm

Weight: ≤15 KgSample Pressure: ≤2 MPa

• Sample Temperature:  $-50^{\circ}\text{C} \sim +100^{\circ}\text{C}$ 

• Highlight: Lab Online FTIR Analyzer,

Lab Fourier Transform Infrared Spectroscopy

Equipment

Online Fourier Transform Infrared Spectroscopy

Equipment









## **Product Description:**

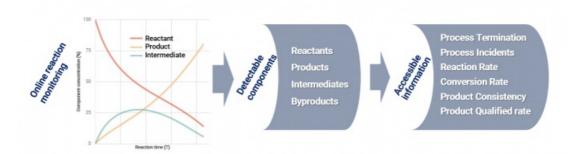
Chemical/pharmaceutical/materials process development and production requires quantitative analysis of components. Usually, offline laboratory analysis techniques are used, where samples are taken to the laboratory, and instruments such as chromatography, mass spectrometry, and nuclear magnetic resonance spectroscopy are used to give information on the content of each component. The long detection time and low sampling frequency cannot meet many real-time monitoring needs.

JINSP provides online monitoring solutions for chemical, pharmaceutical, and material process research and production. It enables in-situ, real-time, continuous, and rapid online monitoring of the content of each component in reactions.

JINSP® IT2000CE online FT-IR analyzer is used for in situ monitoring of chemical reactions.

IT2000CE can measure the content of reactants, products, intermediates, and impurities in the reaction system continuously and quickly, thus predicting reaction rate, reaction termination, conversion rate, and reaction incidents in

IT2000CE is designed for use in lab research, bench-scale tests, or manufacturing environments.



## **Technical Highlights:**

- · Highly applicable:
- · Capability to measure black or deep color samples, without the influence of sample color.
- · Capability to detect liquid components in suspension, getting rid of the interference from solid particles.
- Resistant to high temperature and pressure, strong acid/alkali, and strong corrosive liquid.
- · Fast: Data acquired in seconds.
- Intuitive: Real-time display of the dynamic change of reactants and products.
- Multi-functional: Simultaneous measurement of the concentrations of multiple components.
   Intelligent: Automatic analysis of FT-IR spectra based on the intelligent algorithm.

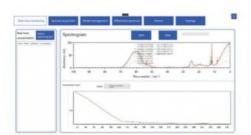
#### **Technical Parameters:**

Technical Parameter	Value
Product	Online FT-IR Analyzer
Measurement Type	Fourier Transform Infrared Spectrometer

Dimension	510×300×250mm		
Weight	≤15 kg		
Resolution	2 cm-1, 4 cm-1, or 8 cm-1		
Sample suitability	Strong acid/alkali and strong corrosive liquid samples can be analyzed		
Display screen	10.5 inch capacitive touchscreen, supporting multi-point touch and multi-angle folding		
Spectral range	500 ~ 5000 cm-1	600 ~ 1800 cm-1	
Sample temperature	-50°C ~ 100 °C	−150°C ~ 230 °C	
Sample pressure	≤2 MPa	≤10 MPa	
Length of optical fiber	-	1.5 m or 3 m	
Connector Interface/ Probe dimensions	Φ6 as standard, 1/8" or 1/4" upon request (steel tubing using tube fittings, or hose using barbed fittings)	L: 300 mm, D: 6.35 mm (Hastelloy alloy) L: 150 mm, D: 6.35 mm (PEEK)	
Material	C276 alloy as standard, 316 stainless steel, 304 stainless steel, Monel alloy, or TA2 upon request	Hastelloy alloy as standard, PEEK upon request	

## **Software functions:**

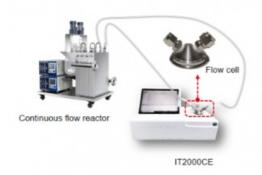
- Real-time analysis while collecting data Multiple absorption peaks of target components can be marked while IR spectra are being collected.
- The change of the marked components is displayed in real time.
- Flexible platform for online monitoring. The embedded quantification model can be used to monitor component concentration in chemical reactions in real-time.





# Usage model:

IT2000CE can connect a bypass to the flow cell in the continuous flow reactor for online monitoring. It is suitable for continuous flow or tubular reactors. It can also use an immersion probe to penetrate deep into the liquid surface of the reaction system to monitor each reaction component, more suitable for kettle batch reactors.





## FAQ:

Q1: This is the first time I use it, is it easy to operate?

A1:We will send you a manual and guide video in English, it can teach you how to operate the spectrometer. Also, our technicians will offer professional technical operation meetings.

#### Q2: Can you offer an operation training?

A2: Your technicians can come to our factory for training. Jinsp engineers can go to your place for local support (installation, training, debugging, maintenance).

## Q3: How to receive the best price in the shortest time?

A3: When you send us an inquiry, please kindly offer details with wavelength, detector, effective pixels, focal length, and so on. We will send you a quotation with details soon to your email.

### Q4:If the spectrometer has a problem in my place, what could I do?

A4: The spectrometer has a one-year warranty. If it breaks down, our technician will figure out what the problem maybe, according to the client's feedback. We can repair for free within one year warranty.

#### Q5: What about quality assurance?

A5:We have a quality inspection team. All goods will go through quality inspection before shipment. We can send you pictures for inspection.



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