

## Handheld FT-IR Spectrometer

## ATP8900Mini

### Features

-  Spectral range 7800-350cm<sup>-1</sup>
-  Spectral resolution 1 cm<sup>-1</sup>
-  7-inch touch screen
-  WIFI, Bluetooth, etc
-  One-touch measurement, evaluation and storage
-  Standard IR spectra database with over 10,000 spectra
-  Real-time display of battery level, charge and discharge status, and temperature
-  26cm×16.3cm×12.8cm; <4.5Kg

### Application

-  Criminal Investigation: Quick Analysis of Explosives at Scene (black powder, ammonium nitrate explosive, TNT, hexogen, etc.), Rapid Forensics of Dangerous Chemicals;
-  Drug Search: Drug Analysis (morphine, Heroin, Methylamphetamine, cocaine, etc.), New psychoactive substances.

### Description

ATP8900Mini is an on-site analysis equipment for rapid and accurate identification of unknown compounds. It is made in China and is self-developed. It is mini, lightweight, durable. The advantages of fast, accurate, high efficiency, and intelligence are perfectly integrated. It has the characteristics of high spectral resolution, low power consumption, light weight, and small size. It can easily meet the sampling needs of the first responder on site. The design of the whole machine is simple and elegant, including a large intelligent touch screen, a fully automatic ATR pressure device and a comfortable handheld terminal. The crystal is made of pure diamond and embedded in a passivated stainless steel plate, which can withstand various solid, powder, fiber, liquid, paste and other samples such as strong acid and alkali and hard rock. Liquid and pasty samples can be tested directly without a pressure device, and other samples only need to be placed in the middle of the ATR crystal, and the pressure head will automatically press down to ensure the consistency and convenience of the pressure during the

analysis process.



**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	7800-350cm <sup>-1</sup>
Resolution	superior to 1cm <sup>-1</sup>
Wave number accuracy	superior to 0.01 cm <sup>-1</sup>
Interferometer	High stability cube-corner interferometer, permanent collimation, service life more than 10 years
beam splitter	Zinc selenide (ZnSe) moisture-proof beam splitter for mid-infrared
Detector	Moisture-resistant high-sensitivity DLaTGS detector with built-in ADC
Infrared light source	Long-life mid-infrared ceramic light source
Laser	Solid-state laser with a lifetime greater than 10 years
Screen	7-inch touch screen with standard data interface and charging interface for wireless and Bluetooth transmission
Power	Built-in rechargeable lithium-ion battery for 4 hours of continuous battery life
Fully automatic function	Automatically display the acquisition interface after starting up, automatically perform ATR measurement, automatically search the database, and automatically display the best results. Automatically save search results or word documents after clicking without human intervention
ATR	Software fully automatic control pressure head, equipped with domestic pure diamond crystal, wear-resistant, corrosion-resistant, easy to clean, can meet the rapid measurement needs of solid and liquid samples
Software	An all-Chinese version processing software with intelligent one-click direct evaluation and storage function. Functions also include: infrared spectrum measurement function, spectral data preprocessing function, fast spectrum comparison function, user-built standard spectrum library function, quantitative analysis function, automatic diamond/CO <sub>2</sub> absorption peak function, intelligent spectrum recognition function, automatic report Create and print functions, etc.
Database	Equipped with a professional infrared spectrum database, more than 10,000 pieces, including the spectra of precursor chemicals, cannabinoids, fentanyl, new active drugs, dangerous chemicals and other substances, among which the spectrum of drugs exceeds 2500 sheets
Size	26cm×16.3cm×12.8cm (including automatic pressure head)
Weight	<4.5kg
Operating temperature	-10°C to +40°C
Storage temperature	-20°C to +55°C

## 1. Partial list of infrared detection items (more than 2500 kinds of drugs can be detected)

Common drugs	Meth (methamphetamine), heroin, K powder (ketamine), cocaine hydrochloride, cocaine base, ecstasy, cough drops, cannabinol, etc.
Precursor chemicals	NPP, 4-ANPP, P-2-P (1-phenyl-2-propanone), piperonal, ephedrine, MEK (methyl ethyl ketone), etc.
Fentanyl	Fentanyl, Sufentanil, Remifentanil, Carfentanil, Orfentanil, Acetylfentanyl, Isobutyrylfentanyl, Valerylfentanyl, Thiofentanyl, Furanfentanyl More than 60 kinds
Synthetic cannabinoids	UR-144, AB-CHMINACA, PB-22, JWH-200, JWH-081, AM-694 and more than 120 kinds
Synthetic cathinones	Cathinone, methcathinone, ethcathinone, 4-chloromethcathinone, 4-bromoethcathinone, 4-CDMC and more than 120 kinds
Phenylethylamines	2-fluoroamphetamine, 3-methoxymethamphetamine, 4-chloroamphetamine, 2C-B, 25I-NB4OMe, 5-APB and more than 80 kinds
Tryptamines	Methyltryptamine, 5-MeO-AMT, 5-MeO-DMT and more than 23 kinds
Explosives	Black powder, ammonium nitrate explosives, TNT, RDX, Taian, etc.
Other	Fluoroamine, 3-MeO-PCP, 3-FPM, Diclorazepam, Fluoxalprazolam, Etizolam, Iphenidate, Benzylpiperazine, 2-Aminoindan, etc.