

## 5G Handheld Raman Analyzer

## ATR6500CH

### Features:

- Replaceable Battery for unlimited life span;
- Various toxic and hazardous gases Alarm;
- Built-in altitude sensor read out;
- Non-Destructive, Fast Detect & Identify, One-touch Operation;
- Advanced algorithm, mixture detection;
- HD 5.5" capacitive touch screen, smooth operation system;
- double cameras of 13-mega plus 8-mega;
- Barcode & QR scan
- Precision GPS positioning;
- Multiple modes of 4G, GPS, GPRS, Bluetooth, WIFI
- Self-Built Spectral Library
- Test results report export pdf
- Built-in Li battery continuous operation 4-6hrs
- Lightweight (480g) , easy-to-take
- IP-66 compliant

### Application:

- Public Safety; Food Safety;
- Hazardous detect at High Speed Train, Metro Entrance
- APIs ,Pharmaceutical raw materials, excipients;
- Gemstones & Materials ID, Mineral sorting
- Experimental Research;
- Antique authentication;
- Minerals Sorting;

### Description:

ATR6500CH is upgraded on the basis of ATR6500, and not only reserve the advantages of super thin, ultra-light, fast ID, but also make it rechargeable battery for field detection extending battery life. The toxic and hazardous gases alarm and readout altitude sensor.

Excellent spectral identification algorithm are embedded in Handheld Raman spectrometers to easily identify substance, and enable users to add their own spectral data. It employs Android system, simple interface, 5.5" high definition screen, double cameras of 13-mega plus 8-mega taking evidence pictures in the field, multiple modes of inbuilt WIFI, Bluetooth, GPS etc.

Optosky provides full technical support and services, including spectral library building, method & verification, IQ/OQ/PQ validation etc.

**Intelligent Mobile Available in Your Palm!**

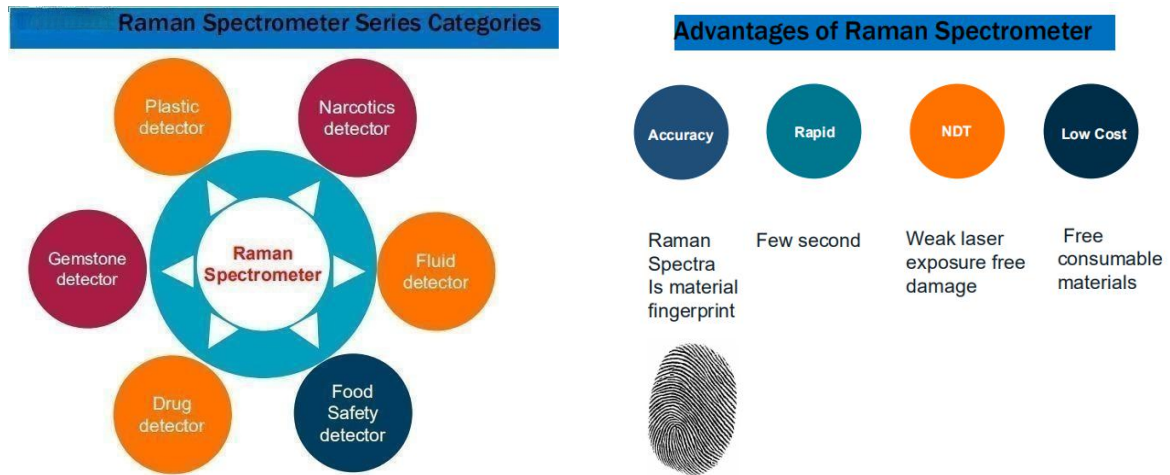


**480g**

## 1 Performance

ATR6500CH System Parameters			
Operative System	Android		
Excitation Wavelength	785 ± 0.5nm		
Wavenumber Range	200-4000 cm-1		
Resolution	10 cm-1		
Touch Screen	5.5", 1920×1080, Multi-Touch		
Size	172×85×30 mm		
Weight	<480g		
Interface	WIFI, USB Type-C, Bluetooth, GSM		
Model Series& Application	Model	Library	Application
	ATR6500	Self-Built Database	Scientific Research
	ATR6500DH	<ul style="list-style-type: none"> <li>Pharmaceutical drugs: Heroin, Cocaine, Metamfetamine, Ketamin...</li> <li>Precursor: (-)-ephedrine, Chloroform, Diethyl ether...</li> <li>Explosives: TNT, RDX, TATP, Ammonium nitrate...</li> <li>Hazmat: sulfate, gasoline, nitric acid, Toluene...</li> <li>Food safety: Illegal food additives, residues of pesticide, veterinary drugs</li> </ul>	Police Customs Metro Court Prison Public Safety
	ATR6500PH	Pharmaceutical raw materials, APIs, excipients...	Pharmaceutical Factory
	ATR6500GM	Gemstones of Diamond, Agate, Emerald...	Gemstones
	ATR6500IN	Chemical products, Plastics, Rubber, Polymer, Compound Etc.	Industrial Application
Export Report	Export reports pdf, csv, txt including detect result, spectral info, evident pictures		
Battery	4-6 hrs, replaceable battery for unlimited battery life		
Other Functions	Readout Altitude, Toxic and hazardous gases warning		
Charging Type	USB Type-C		
Operating Temperature	-20 – 50 °C		

## 2 Application & Advantages



1 Raman Application & Advantages

## 3 Raman Technology Milestones

### Raman Spectrometer Technology

- Focus on developing Raman spectrometer for 20-year.
- China National Standards drafter of Raman spectrometer
- In 2016 launch the first generation handheld Raman spectrometer,
- In 2017 launch the dual-band Raman spectrometer
- In 2020, launch the triple-band Raman microscope
- In 2021, launch the quadriband scientific-grade Raman microscope
- ISO, CE, FDA Approval, Police Approval, API Approval
- Originate in Chinese Academic of Science University and Xiamen University

2 Raman Spectrometer Milestones

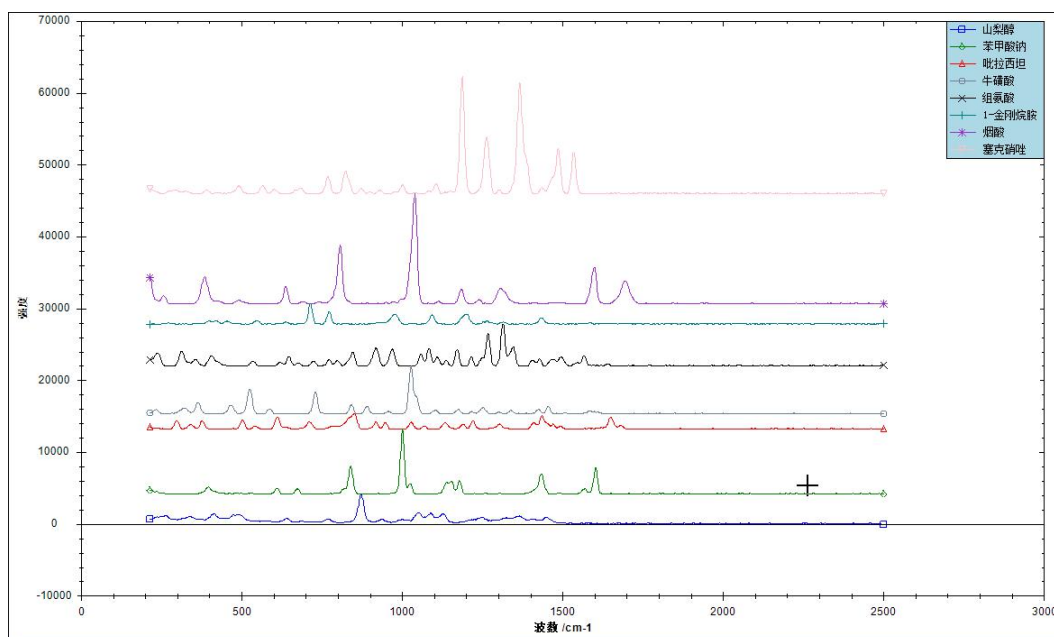
## 4 Raman Spectrometers Family

**Raman Spectrometer Series**

Scientific-Grade Raman Microscope Quadriband ATR8800 Series	Triband Raman Microscope ATR8500 Series	Raman Microscope ATR8300 Series	High Troughput Raman ATR8000	
ATR3110	ATR3000	ATR3000FD	ATR 3200	
ATR6600 Pro Super Speed 1064nm	ATR6600 1064nm	ATR6500CH 785nm	ATR6500CH 532nm	ATR6500 785nm
Mini-Raman ATR1600	Teaching Raman ATR1200	Mini portable Raman ATR2500	Underwater Raman ATR3700	

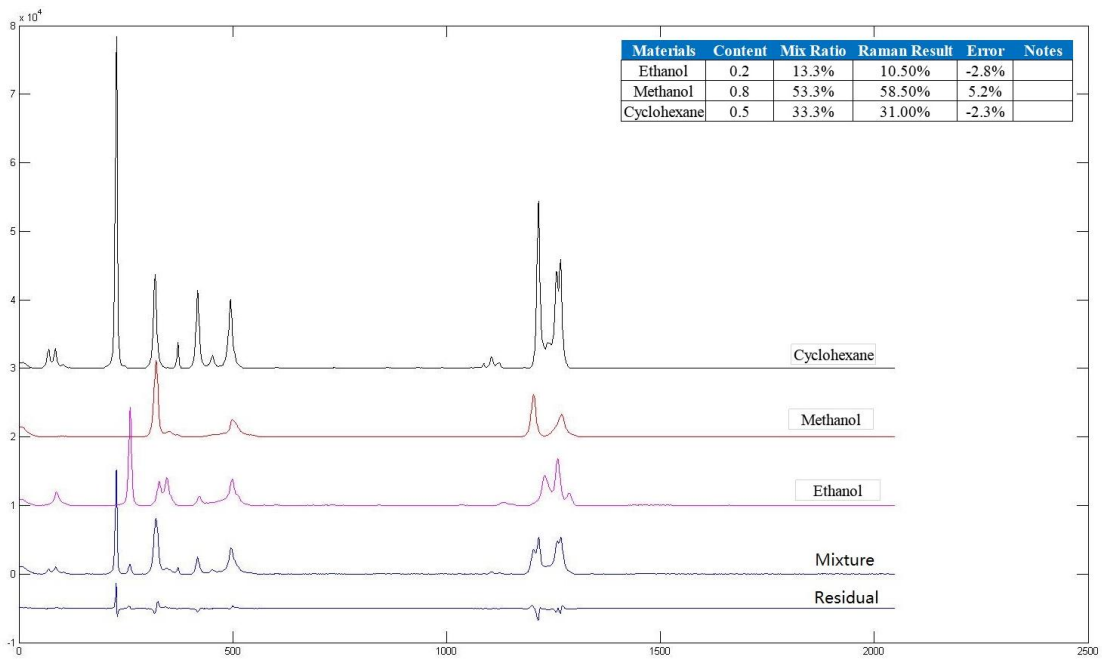
3 Raman Models Selection

## 5 ATR6500CH Spectra Example



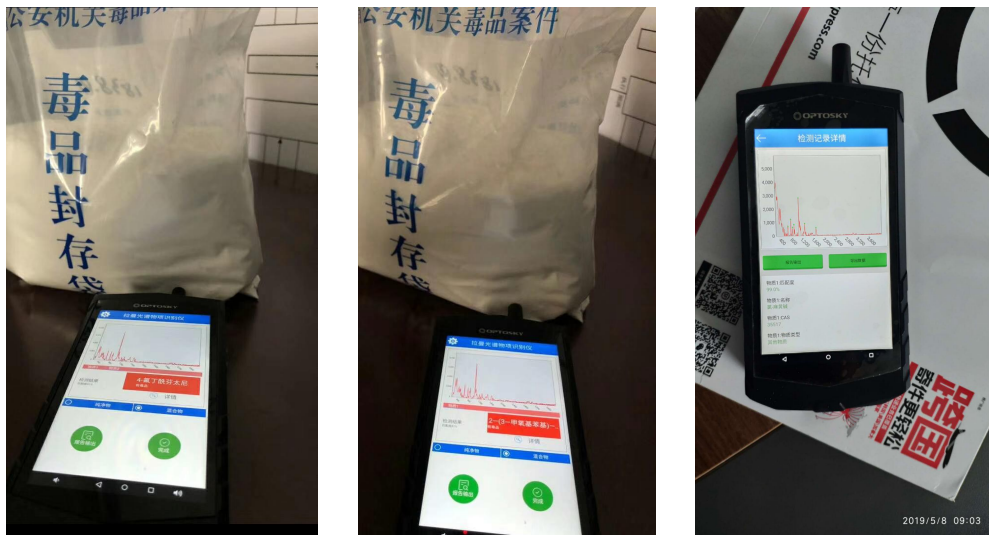
4 ATR6500CH measured Spectra of Sorbitol, Sodium Benzoate, Piracetam, Taurine, Histidine, Amantadine, Niacin, Secnidazole

# DataSheet



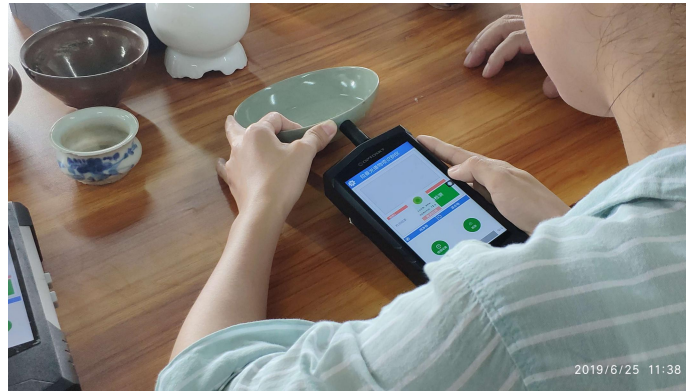
5 ATR6500CH Mixture Spectra

## 6 ATR6500 Field Pictures

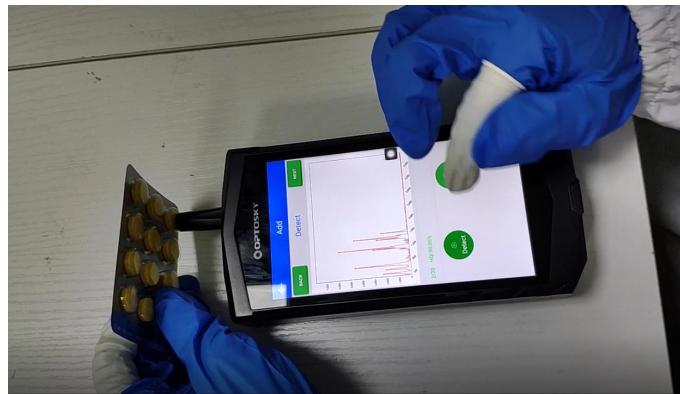


6 ATR6500CH pictures of narcotics ID in police station

# DataSheet



7 ATR6500CH ceramics ID



8 ATR6500CH Pharmaceutical ID