

Miniature Raman Mobile

ATR1600

Feature:

- Non-Destructive, Fast Detect & Identify, One-touch Operation.
- Bluetooth 4.1 communication.
- Mobile app operation.
- Precision algorithm, mixture detection
- Test results report export pdf
- Built-in Li battery continuous operation 4-6hrs
- Ultra-light weight (275g),easy-to-take
- Class 1P-67 dust proof and waterproof industrial protection.

Application:

- Police arrest drug dealer.
- Detection of dangerous compounds at entrances of high-speed rail, subway and BRT.
- Raw ingredients ID in the pharmaceutical industry.
- Food safety inspection.
- Gem identification.
- Industrial material ID and process control.
- Cultural relic identification.
- Mineral screening.

Description:

ATR1600 is the latest 5th generation ultra-miniature Raman spectroscopy system launched by Optosky. It has the characteristics of ultra-light, ultra-thin, small size, etc. The whole machine is only 275g, suitable for one-hand operation and very convenient to carry.

The Android APP attached to the ATR1600 has an excellent Raman spectral recognition algorithm. And built-in standard spectral library of up to more than 20,000 substances. Which can detect substances indiscriminately, easily identify them, and add users' own spectral data.

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

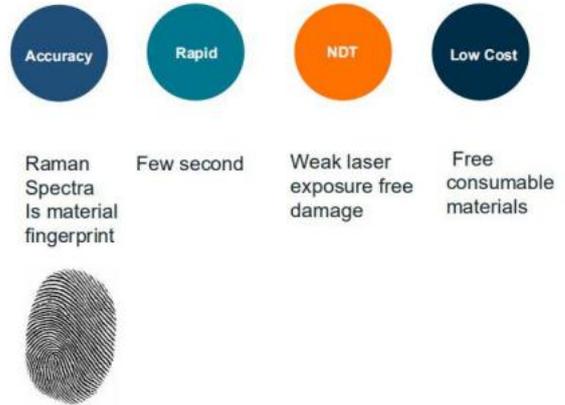
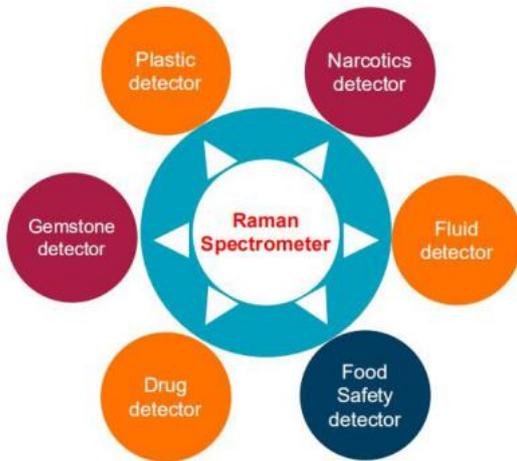
Intelligent Mobile Instrument Available in Your Hand!



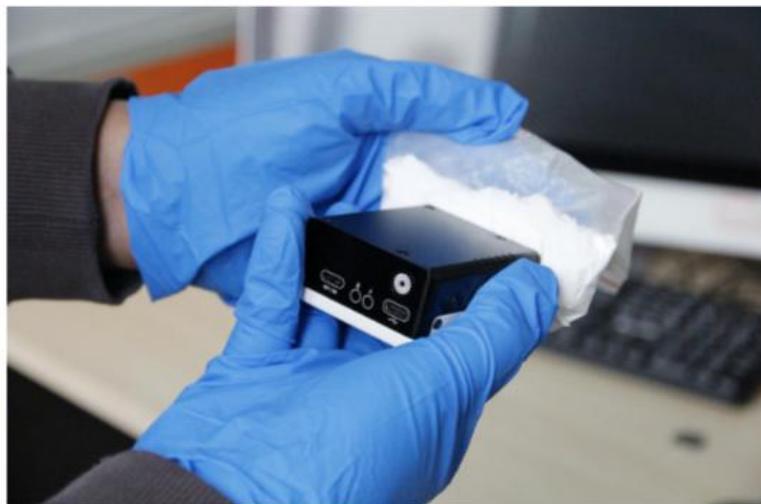
1. Parameter

ATR1600 System			
Operative System	Android Installed App		
Excitation Wavelength	785 ± 0.5nm		
Wavenumber Range	200-3000 cm-1		
Resolution	18 cm-1		
Size	62×52×26.5mm		
Weight	275g		
Interface	Type-C, Bluetooth		
Model Series& Application	Model	Library	Application
	ATR1600	Self-Built Database	Scientific Research
	ATR1600	<ul style="list-style-type: none"> ● Pharmaceutical drugs:Heroin, Cocaine, Metamfetamine, Ketamin... ● Precursor: (-)-ephedrine, Chloroform, Diethyl ether... ● Explosives: TNT,RDX,TATP, Ammonium nitrate... ● Hazmat: sulfate, gasoline, nitric acid, Toluene... ● Food safety: Illegal food additives, residues of pesticide,veterinary drugs 	Police Customs Metro Court Prison Public Safety
	ATR160PH	Pharmaceutical raw materials, APIs, excipients...	Pharmaceutical Factory
	ATR1600GM	Gemstones of Diamond, Agate, Emerald...	Gemstones
	ATR1600IN	Chemical products, Plastics, Rubber, Polymer, Compound Etc.	Industrial Application
Battery	4-6 hour continuous operation		
Charging Type	USB Type-C		
Operating Temperature	-20 – 50 °C		

2. Performance Test

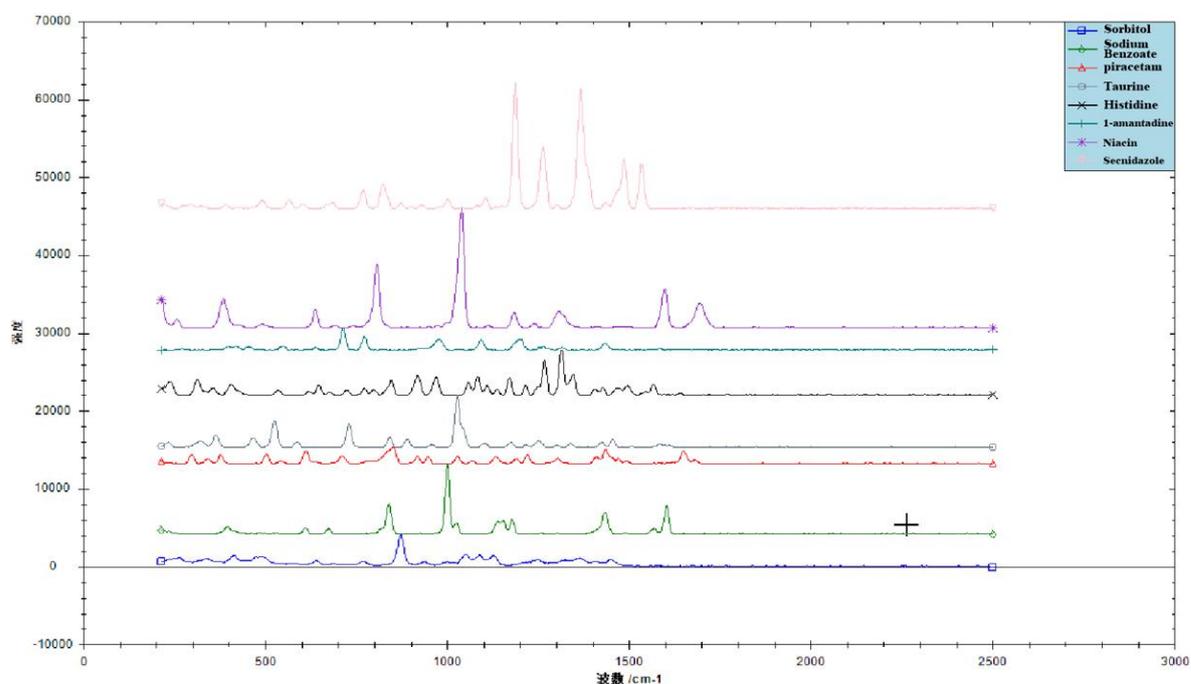


3. Example Pictures





4. ATR1600 Test Spectra:



5. Company Profile

Optosky company is a first-class spectroscopy solution provider, with the headquarter locates in the 7th floor of the research institute of the Chinese Academic of Science at an area of 2500 square meter in Xiamen city where successfully held the international 9th BRICK summit in 2017. The subsidiary company locates in Wuhu city with an area of 2035 square meters.

The company founder Dr. Hongfei, Liu graduated Doctor degree from the Chinese Academic of Science and postdoctoral degree from Xiamen University, by integrating both of top Universities' spectroscopy technology background into Optosky company aiming at developing the leading spectroscopy equipment in the world.

The company bases on unique technologies of Optomechatronics, Spectroscopy Analysis, Process Weak Optical and Electrical Signals, Cloud Computing, and have been developed wide products line of the competitive Raman spectroscopy instruments, micro spectrometer, hyperspectral imager, field spectroradiometer, fluorescence spectroscopy, LIBS etc. Driven by advanced technologies and products, Optosky brand has been well-known to customers all over the world.

Optosky company base on technology innovation, market-driven direction, customer first, provides first-class products and services, and one-stop solutions to many fortune 500 companies in many industries. The company received praise from different industry companies, as well as many innovative intellectual properties, software copyright, qualification certification, and winner awards over hundred numbers.

Optosky receives top class A introduced the high-tech company to international Xiamen city, the national high-tech and new innovative technology company award. The founder Dr. Hongfei Liu receives the innovation talent award by the ministry of science and technology.

The company is currently conducting the exclusive project of major industrialization national oceanic administration with a total fund of five million us dollars. The company in charge of drafting national industry standard of VNIR and SWNIR Field Spectroradiometer, and six national standard drafters, including China National Standard Drafter for Hazmat detector based on Raman spectroscopy, China National Standard Drafter for Buoy-type Monitor eco-environment, China National Standard Drafter for water quality monitor in the unmanned boat, China National Standards drafter for online water quality monitor by spectroscopy, China National Standard Drafter for UV-absorbent measure fabrics.

The company has over 70 IPs and over 20 innovative patents.

The company received ISO9001:2015 certification, CE certification, Police Administration Certification, FDA approval compliant, IQOQPQ compliant.



Figure 1 Optosky (Xiamen) Photonics Inc. Company Headquarter

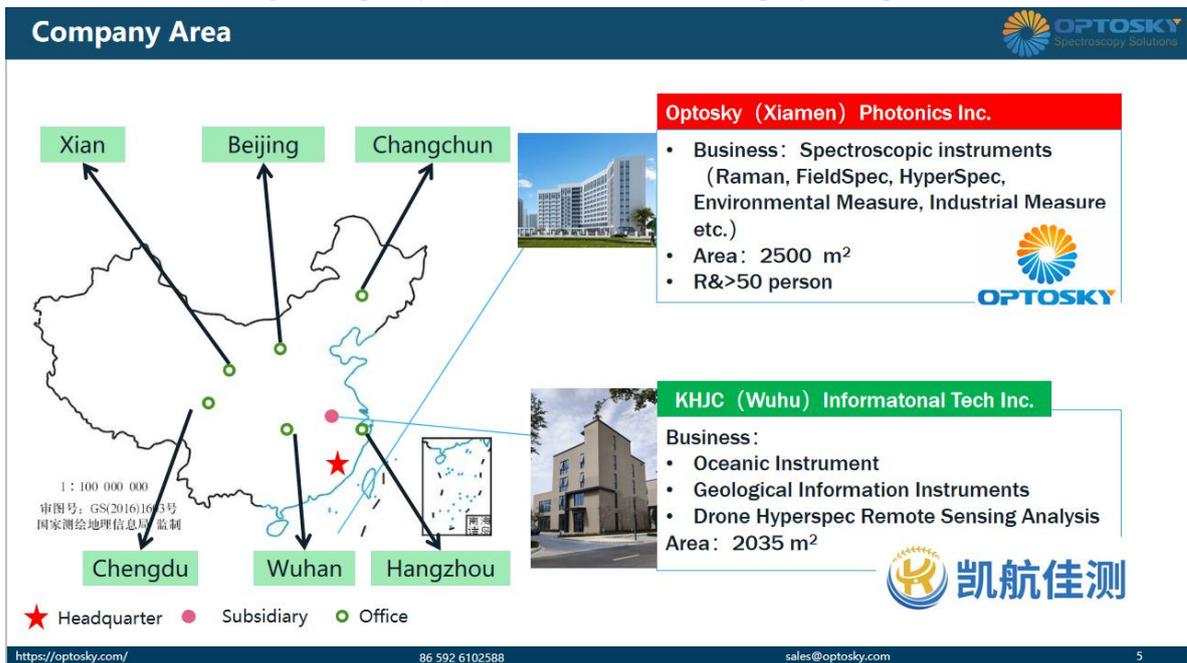


Figure 2 Optosky Company Area

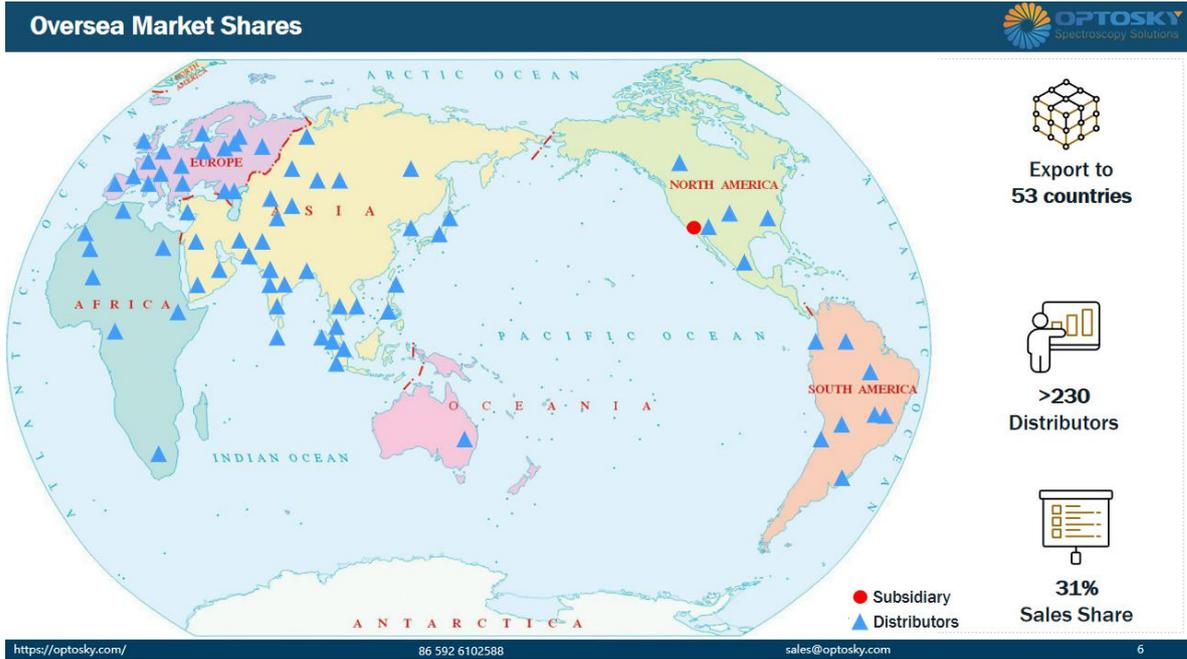


Figure 3 Oversea Market Shares



Figure 4 Optosky Chair and Draft National Standards Lists.

Qualification



 ISO9001:2005	 GB/T 23001 Informationization & Innovation	 CE, RoHS, LVD 17 models	 Police Approval 11 models
 GB/T 29490 IP implementation	 5 Innovative patents	 35 patents new utility design	 32 Software copyright

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Figure 5 Qualification

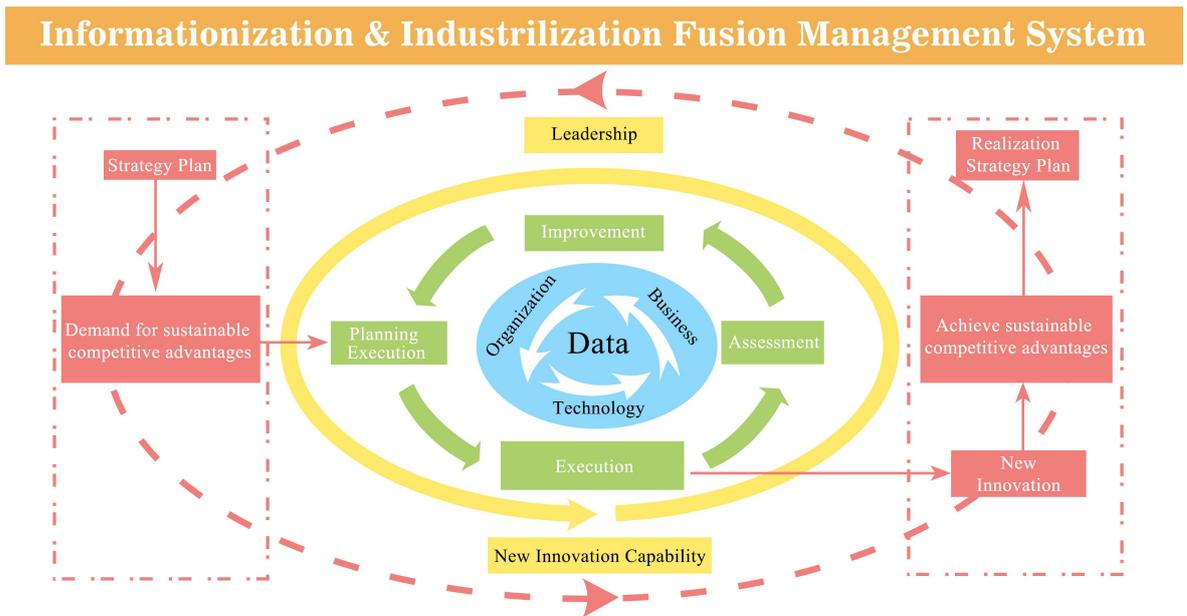


Figure 6 GB/T 23001_ Informationization & Industrilization Fusion Management System

Co-Founder—Dr. Hongfei Liu



Postdoctoral Hongfei Liu

- Selected "Innovative Talent" by Science and Technology ministry
- Top Class A Talent by Xiamen City
- CCTV Science & Technology Interview
- Fortune 500 experience in Agilent, II-VI

Honors

- Selected by science & technology ministry as "Innovation Talent"
- CCTV Science & Technology Interview
- Top Class A Talent credited by Xiamen City
- **Innovation Hero**

Education

- PhD • Chinese Science of Academic • Prof. Gui-Lin Chen, Originator in spectroscopy
- Postdoctoral • Xiamen University • Prof. Zhong-Qun Tian guided by the SERS founder M.Fleischmann

Career

- Engineer → R&D Manager → GM
- **Agilent**, Leader of instrument, Fortune 500 company, Job: engineer
- II- VI Incorporated (Nasdaq: IIVI) leader in optical & electrical industries, Job: GM of Instrumentation and Automation

Academic

- University graduate tutor
- obtain more than 60 IPs, more than 10 Innovation patents;
- Publish more than 20 papers, 2 recorded SCI, 8 recorded EI



Selected "Innovative Talent" by Science and Technology ministry



Top Class A Talent by Xiamen City



Founder & Tutors

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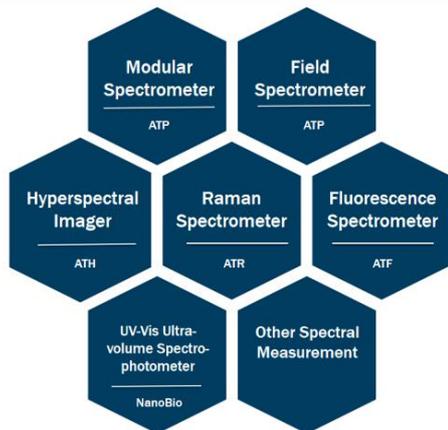
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Figure 7 Optosky's Co-founder_Dr. Hongfei Liu

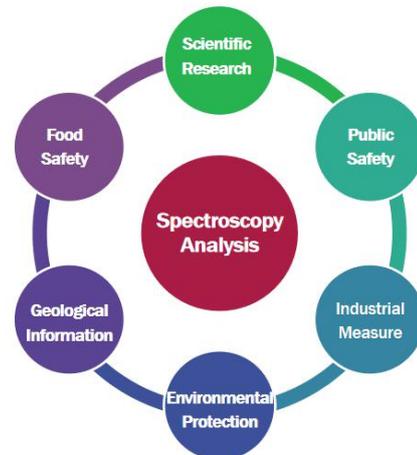
Category & Application



Category



Application



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Figure 8 Category & Application



Model Name Rule

Model Name Rule:

- Prefix
- Category
- Model
- Suffix

Prefix

↓

Abbreviation
OPTOSKY

AT R

↑

Category

3000

↑

Model

- 1064

↑

Suffix

- **ATR** - Raman Spectrometer
- **ATP** - Micro Spectrometer
- **ATH** - Hyperspectral Imager
- **ATF** - Micro Fluorescence Spectrometer
- **ATL** - LIBS
- **ATW** - Water
- **ATE** - Environment Protect
- **ATFD** - Food Safety
- **GA** - Public Safety (**Gong An**)
- **GF** - Gas Monitor (**Gas Finder**)
- **GY** - Industrial Monitor (**Gong Ye**)

eg:

- Raman Microscope: ATR8300MP-1064
- Hyperspectral Imager: ATH9500

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Figure 9 Model Name Rule