

# Handheld Raman spectrometer

## INOHRS-785

### Features:

- 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 (450g) , easy-to-take
- IP-67 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:

INOHRS-785 is upgraded on the basis of handRam, 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.

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

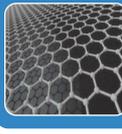
**Intelligent Mobile Available in Your Palm!**



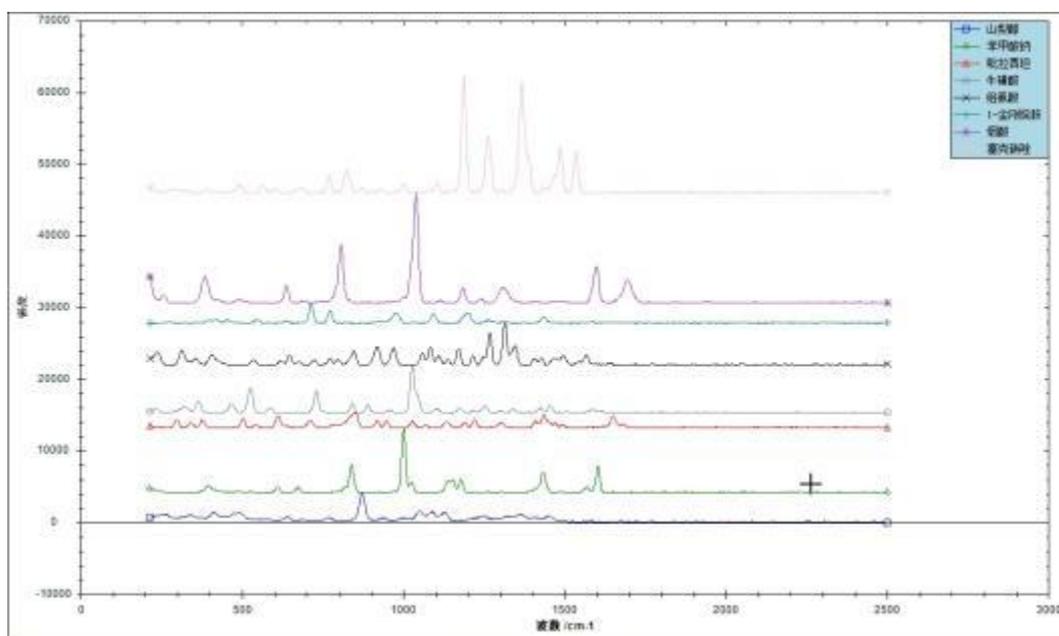
# 1 Performance

| INOHRS-785 System Parameters |   |   |  |
|------------------------------|---|---|--|
| Operative System             | Android   |   |  |
| Excitation Wavelength        | 785 ± 0.5nm   |   |  |
| Wavenumber Range             | 200-4000 cm-1 or 100~3900cm-1   |   |  |
| Resolution                   | 7 cm-1  |   |  |
| Touch Screen                 | 5.5", 1920×1080 , Multi-Touch   |   |  |
| Size                         | 172×85×30 mm  |   |  |
| Weight                       | 450g  |   |  |
| Interface                    | WIFI, USB Type-C, Bluetooth, GSM  |   |  |
| Model with Library           | Model   | Spectrum Library  | Application  |
|                              | INOHRS-785  | Self-Built Database   | Scientific Research  |
|                              | INOHRS-785-DH   | Pharmaceutical drugs:Heroin, Cocaine, Metamfetamine, Ketamin...<br>Precursor: (-)-ephedrine, Chloroform, Diethyl ether...<br>Explosives: TNT,RDX,TATP, Ammonium nitrate<br>Hazmat: sulfate, gasoline, nitric acid, Toluene<br>Food safety: Illegal food additives, residues of pesticide,veterinary drugs | Police<br>Customs<br>Metro<br>Court<br>Prison<br>Public Safety |
|                              | INOHRS-785-PH   | Pharmaceutical raw materials, APIs, excipients ...  | Pharmaceutical<br>Factory                                      |
|                              | INOHRS-785-GM   | Gemstones of Diamond, Agate, Emerald...   | Gemstones  |
|                              | INOHRS-785-IN   | Chemical products, Plastics, Rubber, Polymer, Compound..  | Industrial<br>Application                                      |
| Export Report                | Reports format pdf, csv, txt of detect results, spectra, evident pictures |   |  |
| Battery                      | replaceable battery for unlimited battery life , standby times >72 hrs;   |   |  |
| Charging Type                | USB Type-C  |   |  |
| Operating Temperature        | -20 – 50 °C   |   |  |

## 2 Applications

|   |  |  |
|---|--|--|
|  <p><b>Biochemical Industry</b></p> <ul style="list-style-type: none"> <li>• Cancer diagnosis</li> <li>• Non-invasive blood sugar</li> <li>• Cell</li> </ul> |  <p><b>Pharmaceutical Science</b></p> <ul style="list-style-type: none"> <li>• Drugs QC</li> <li>• Online Inspection</li> </ul> |  <p><b>Semiconductor</b></p> <ul style="list-style-type: none"> <li>• Defect</li> <li>• Fake</li> </ul> |
|  <p><b>Public Safety</b></p> <ul style="list-style-type: none"> <li>• Narcotics</li> <li>• Explosives</li> </ul>   |  <p><b>Material Science</b></p> <ul style="list-style-type: none"> <li>• 2D materials</li> <li>• Graphene</li> </ul>            |  <p><b>Energy</b></p> <ul style="list-style-type: none"> <li>• Li-battery materials</li> </ul>          |
|  <p><b>Food Safety</b></p> <ul style="list-style-type: none"> <li>• Oil</li> <li>• Pest residues</li> <li>• Food additives</li> </ul>                        |  <p><b>Gemstones</b></p> <ul style="list-style-type: none"> <li>• Diamond</li> <li>• Origin</li> </ul>                          |  <p><b>Cultural Relic</b></p>   |

## 3 Spectra Example



INOHRS-785 measured Spectra of Sorbitol, Sodium Benzoate, Piracetam, Taurine, Histidine, Amantadine, Niacin, Secnidazole