

# Handheld Raman Spectrometer



## Inspection material

drugs, precursor chemicals, narcotic drugs, psychoactive substances, explosives and explosive chemicals, other flammable and explosive chemicals, highly toxic substances, prohibited additives, jewellery, jade, etc.

## Application scenarios

Use the handheld Raman alone to directly test the macroscopic amount (area 1mm<sup>2</sup> is enough) and the relatively high purity (content not less than 10%) substance on the spot, and the composition information of the substance can be obtained.

- a) Advantages: easy to use (one-key detection), no need for pre-processing, fast speed, results can be obtained within 10s. In-situ, non-destructive
- b) Disadvantages: Cannot test low-concentration samples (such as: 1% or less).

With enhanced reagents, micro-content samples can be measured

- a) Advantages: Micro-content of contraband can be measured, and the minimum detection limit can be as low as ppm.
- b) Disadvantages: sampling and simple pre-processing are required, which takes a long time (within 10 minutes), and the testers need relatively more training to master the test skills.

## Specification

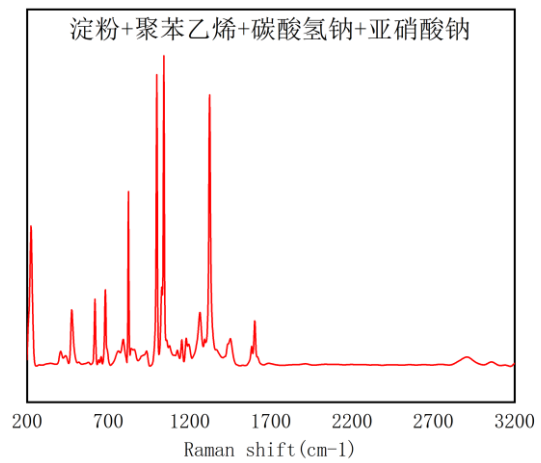
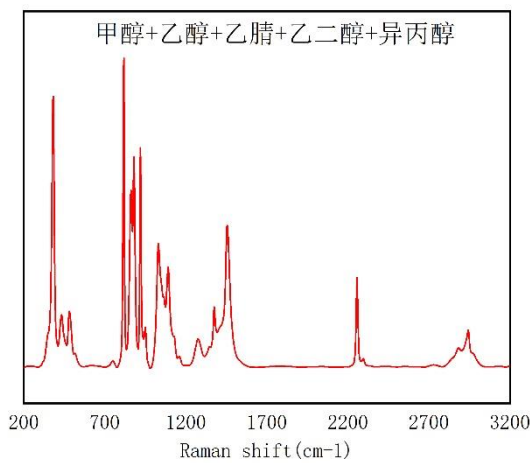
Model	785 Model	1064 Model
Size	182*88*30mm	197*90*45mm
Weight	~ 500g	~ 800g
Wavelength	785nm	1064nm
Output Power	0~500mW tunable	
Wave Number	200 ~ 3200cm <sup>-1</sup>	200 ~ 2500cm <sup>-1</sup>
Resolution	6 ~ 8cm <sup>-1</sup>	~10cm <sup>-1</sup>
Working temperature	-20 ~ 50°C	0 ~ 40°C
Spot size	~100um	
laser lifetime	10000hr	
Batter life	>12 hours	
Working distance	Tunable	
Connection	WiFi, 4G	
Data storage	>1k	
Picture resolution	1200Mega Pixel	
Software	Real-time result & testing report etc	

## Technical advantages

- It supports the identification of 4 or more mixtures with high accuracy, Customizable mixture recognition depth
- Integrated reflective spatial optical path, high sensitivity, small aberration, and long service life
- Easy to replace the battery and have a long battery life (24 hours battery life)
- Use safe and long-life industrial 18650 batteries
- Cloud backend
- Support SMS alarm push
- Wide band range, more accurate detection, more types of measurable substances

## Mixture identification

- Support up to 5 kinds of mixture composition analysis, and ratio reference
- Calculation time <10s, efficient and quick inspection
- <10% High accuracy rate, false alarm rate <10%



## High fluorescent substance recognition

- With highly sensitive hardware, algorithms are used to extract signals of substances hidden in fluorescence, which can accurately identify highly fluorescent substances such as heroin, ketamine, xanthan gum, and cellulose.

