

## Handheld Raman Spectrometer

# NW1500

*perform 100% package-by-package inspection*



NW1500DI can perform 100% package-by-package inspection of both raw materials and packaging materials. It can quickly identify raw materials in warehouses, material preparation rooms, production workshops, etc., helping pharmaceutical companies to quickly release materials.

RS1500DI uses a unique 1064nm laser with a broad detection range, especially for amino acids, coenzymes, cellulose and other raw materials with strong fluorescent signals.

Furthermore, RS1500DI is compliant with relevant regulations such as FDA 21CFR Part 11 and GMP.

### Technical Features

- ♦ Wide detection range: chemical and biochemical raw materials and pigments can be identified
- ♦ Convenient: it can directly detect through glass, woven bag, paper bag, plastic and other packaging
- ♦ Compact and lightweight: it can be flexibly moved in warehouses, material preparation rooms, production workshops, etc.
- ♦ Quick response: identification can be completed within seconds

# 500DI Handheld Raman Spectrometer

- ◆ No need to take samples, no need to transfer raw and auxiliary materials to the sampling room, which can avoid sampling pollution
- ◆ Identification accuracy: Advanced machine learning algorithm supports accurate recognition



## Product Advantages

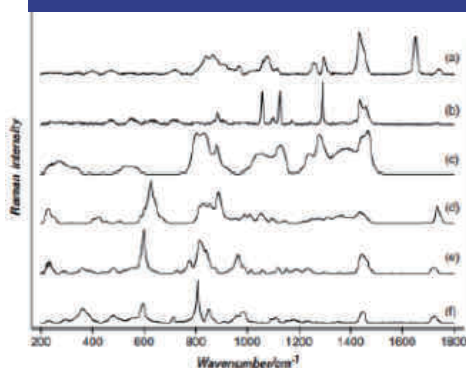
### ✓ Wide detection range

- ◆ **Chemical raw materials:** aspirin, acetaminophen, folic acid, nicotinamide, etc.
- ◆ **Pharmaceutical excipients:** salts, alkalis, sugars, esters, alcohols, phenols, etc.
- ◆ **Packaging materials:** polyethylene, polypropylene, polycarbonate, ethylene-vinyl acetate copolymer, etc.

### Compared with ordinary 785nm Raman, it has stronger detection ability

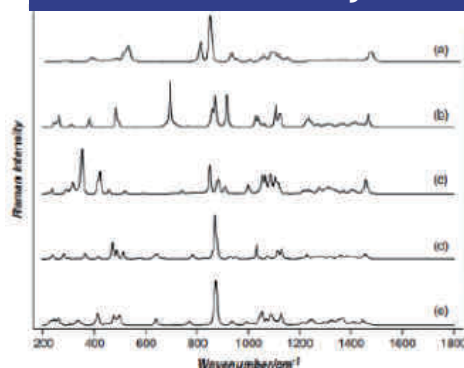
- ◆ **Biochemical raw materials:** amino acids and their derivatives, enzymes and coenzymes, proteins, etc.
- ◆ **Pigment excipients:** carmine, carotene, curcumin, chlorophyll, etc.
- ◆ **Other polymer excipients:** gelatin, microcrystalline cellulose, etc.

#### Esters



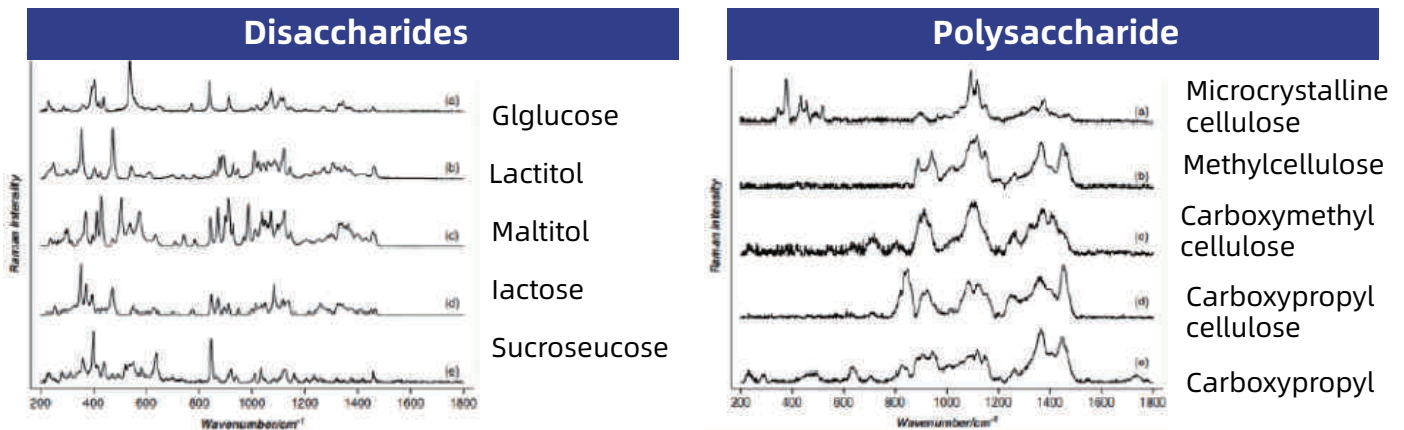
Peanut oil  
Hydrogenated  
Cotton Seed Oil  
Dibutyl dioate  
Triacetin

#### Polyols



Propylene Glycol  
Erythritol  
Xylitol  
Mannitol  
Sorbitol

# 1500DI Handheld Raman Spectrometer



## ✓ No sampling required

It can directly detect through woven bags, plastic, glass, paper packaging, and other types of packaging.

Woven Bag



Plastic Packaging



Glass Bottle



Plastic Barrel

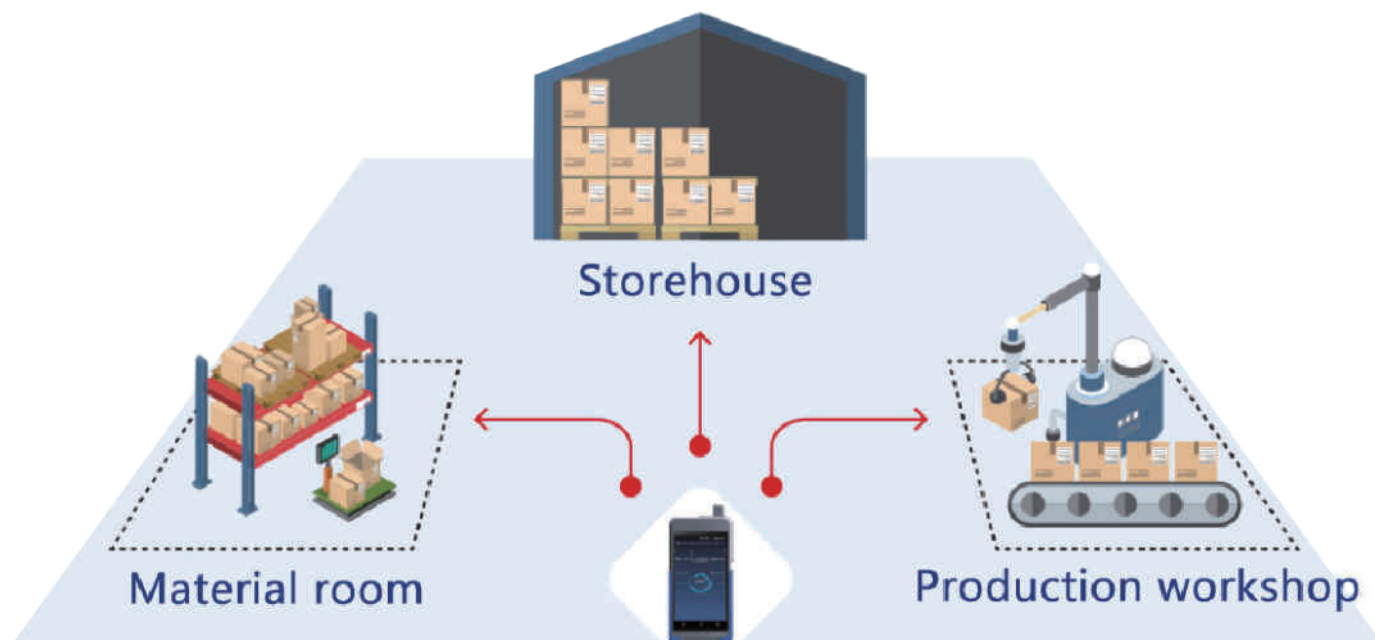


Paper Packaging



## ✓ **Wide application area**

Compact and lightweight, a single device can fulfill the requirements of multiple environments, including warehouses, material preparation rooms, and production workshops.



## **Related legislation**

GMP2015. Article 110 of Chapter 6: Corresponding operating procedures shall be formulated, and appropriate measures such as checking or inspection shall be taken to confirm that the raw and auxiliary materials in each package are correct.

Chinese Pharmacopoeia 2020. Chapter 0421 Raman spectroscopy: Raman spectroscopy can provide information on functional groups in sample molecules, so it can be used for identification tests and structural analysis.