



CDI 1BT BENCH-TOP RAMAN SPECTROMETER

A cost-effective and easy to use substance identification solution, for laboratories

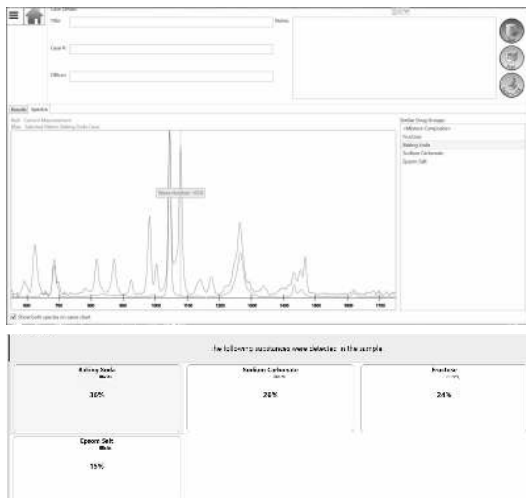
SPECIFICATIONS

CDI 1BT is specially built for use in laboratories. It measures the spectra of solid, liquid, gel and powder samples.

Select CDI 1BT to identify unknown substances or run an express analysis, quality control or quantitative analysis of raw materials as well as final products. Optionally, CDI 1BT can be equipped with a PC, additional spectral databases and analytical software, vials and sample holders (e.g.: test tubes, tablets, etc.).

Main Highlights

1. Identifies up to 4 compounds and their relative percentage within the mixture
2. Identification of substances that are as little as 10% from overall mixture
3. Measurement time is less than 15 seconds
4. Measurements through transparent packaging (e.g.: baggies, packages, evidence bags, blisters, glass ampoules)



Identification of four components in a mixture in less than 15 seconds



Main Features

Versatile

Identifies a wide range of chemical substances:

- Narcotics and pharmaceuticals
- Plastics and polymers
- Explosive compounds
- Toxic agents

Extensible

- 3,600 pharmaceuticals
- 200 narcotics/cutting agents
- Seamless library update
- User-friendly and easy-to-use way to add spectra

Fast

- No sample preparation
- Results are ready in about 15 seconds

Cost-effective

- No consumables
- 16,500 USD incl. VAT

Coherent

- Easy to use
- Clear reports
- Transparent measurement history
- No or little training required

Specifications

Weight	5.3kg / 11.7lb
Dimensions	16.5 x 28 x 9 cm / 6.5 x 11 x 3.5 in
Libraries	- 3,600 pharmaceuticals - 200 narcotics/cutting agents - Coda Devices and S.T. Japan libraries
Export data format	CSV, Excel® Spreadsheets, PDF
Data transfer	USB
Software languages	English, Russian, Chinese, Spanish, Portugal, Vietnam, Thai
Spectral range	500 - 1,800 cm^{-1} / 300 - 2,900 cm^{-1}
Spectral resolution	6 - 8 cm^{-1} / 8 - 9 cm^{-1}
Laser wavelength	785 nm \pm 0.5 nm
Analyzed square	1.5 mm^2
Production	California, USA or Moscow, Russia

Company and Technology

Coda Devices is an international company founded in 2015 with the single purpose of developing and manufacturing Raman-based solutions for analyzing the chemical composition of substances. Coda Devices headquarter is located in Menlo Park, California as well as the US production facilities. R&D centre along with local production situated in Moscow, Russia.

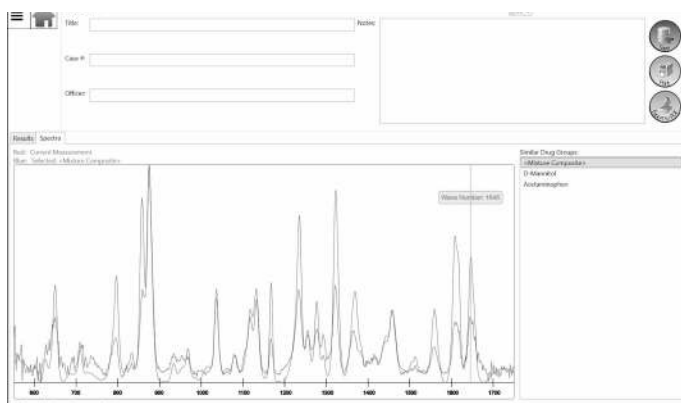
CDI 1BT is based on Raman spectroscopy, optical spectroscopy method that exploits scattering of light. This method is based on a property of molecules to scatter laser light inelastically. Frequencies of inelastically scattered light bare "fingerprints" unique to compound's molecules. Thus allowing to identify compound itself.

This exclusive to Coda Devices technology is based on coded multi-slits aperture (US Patent No. 7,301,625,7,505,130). It can significantly improve the sensitivity of a spectrometer and at the same time reduce production and final costs.

Easy to use software enables identification of unknown substances, quantitative analysis, and quality control. End-users can create measurement reports and custom spectra libraries at glance. Coda Devices offers exclusive narcotic and pharmaceutical spectral libraries. Supplementary software packages and spectral libraries from Grams Thermo and S.T. Japan are available for in-depth spectra analysis and processing.

CDI 1BT is suited for different tasks, including:

- controlling quality of input, intermediate and final products by confirming components' concentrations are within determined ranges (pharmaceutical and polymer industries, jewellery and attribution of work of art)
- identifying unknown substances (forensic science, chemistry, security, biology, geology and material science)
- defining concentrations of known compounds (R&D in a pharmaceutical, chemical and polymer industries)



Acetaminophen spectra