



• **BRAVO** Handheld Raman Raw Material Analyzer

Specifications

BRAVO is the reliable high performance handheld analyzer for raw materials identification using Raman spectroscopy. Due to its outstanding performance and design it enables the identification of even dark, fluorescing and weak scattering samples within seconds.

An easy and user friendly operation is provided by an intuitive graphical user interface (GUI) supported by a large touch screen.

Design

- Housing: rugged and sealed
- Technique: dispersive Raman spectroscopy with proprietary fluorescence rejection
- Detector: CCD
- Display: high resolution display with touchscreen (15.0 x 9.4 cm)
7" Back-lit IPS HD Display, Resolution 1280x800 (219 ppi, 178 degree viewing angle)
- Capacitive Touch Panel
- Calibration: integrated

Raman Performance

- Spectral range: 3.200 - 300 cm⁻¹
- Spectral resolution: 10 - 12 cm⁻¹
- LASER excitation wavelength: 785 nm and 852 nm (Duo LASER™)
- LASER power / output: low laser power, < 100 mW for both LASERs

Dimensions

- Size: 27.0 (W) x 15.6 (D) x 6.2 (H) cm
- Weight: 1.5 kg (3.3 lbs)

Electronics

- Automation: integrated microprocessor
- Status information: Laser on/off & released
- WLAN device*: for data transfer

Operating Environment

- Protection: IP54
- Operating temperature: 5-35°C
- Operating relative humidity: 0-95% non-condensing
- Regulatory certification and compliance: CE, FCC

Validation

- Instrument qualification: USP 1120, EP 2.2.48, ASTM E2529-06, ASTM E1840-96
- Software compliance: 21 CFR Part 11

Options

Docking station

- Size: 36.5 (W) x 15.0 (D) x 13.0 (H) cm
- Weight: 1.9 kg (4.2 lbs)
- Power requirements: 100 to 240 VAC, 50/60 Hz
(for docking station and battery charger)

* Only available in Canada, China, EU, Iceland, India, Japan, Korea, Liechtenstein, Norway, Switzerland and USA.

Technologies used are protected by one or more of the following patents:
US 8,570,507 B1. Additional patents are pending.

Bruker Optics is ISO 9001 and
ISO 13485 certified.

Laser class 1M

Viewing the laser output with certain
optical instruments (e.g. magnifying
glasses and microscopes) within a
distance of 100 mm may result in eye
damage.

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