

## Product Datasheet

### LIBSCAN 50™ & LIBSCAN 100™

#### MATERIAL CHARACTERIZATION SYSTEM



#### Features

- Compact and field-deployable
- Waterproof and ruggedized instrument case
- 50 mJ laser (LIBSCAN 50) or 100 mJ laser (LIBSCAN 100)
- Class 1 laser product (fully-contained laser beam)
- Up to four spectrometer modules may be installed. Wavelength range approx. 200 – 900 nm, spectral resolution ( $\lambda/\Delta\lambda$ ) of up to 3000.
- Integral sample chamber with sample holder, XY micro-positioner stage, and laser-safe viewing window
- External laser power supply easily disconnected to facilitate transportation
- May be operated with a laptop PC, PDA or other device running Windows®†
- Software and library upgrades

† Windows® is a registered trade mark of Microsoft Corporation

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Specifications subject to change without notice

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## General Specifications

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Technology:	Laser-Induced Breakdown Spectroscopy (LIBS)
Laser source:	Q-switched Nd:YAG operating at 1064 nm (Class 4 laser device)
Laser pulse energy:	50 mJ (LIBSCAN 50) or 100 mJ (LIBSCAN 100)
Laser PRF:	Up to 20 Hz
Spectrograph:	Up to four spectrometer modules may be installed. Wavelength range approx. 200 – 900 nm and spectral resolution ( $\lambda/\Delta\lambda$ ) of up to 3000 - dependent on chosen specification of each spectrometer module (see <a href="http://www.avantes.com">www.avantes.com</a> for further information on spectrometer specifications)
Size:	525 x 436 x 217 mm (excluding external laser power supply)
Sample interface:	Integral sample chamber with manually adjustable XY micro-positioner stage
User Interface:	External PC, laptop or PDA running Windows® operating system
System Software:	Data acquisition, processing and recording via user-friendly LIBSoft™ software
Power requirements:	110 VAC, 50-60 Hz, <1.0 KVA
Product Class:	Class 1 laser product containing a Class 4 laser device

## Included Libraries

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All elements from hydrogen to plutonium  
Selected alloys  
Selected chemical compounds



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