



Handheld LIBS Analyzer for the Pharmaceutical Industry

LIBS Solution



The NanoLIBS® Handheld LIBS Analyzer is a state-of-the-art handheld Laser Induced Breakdown Spectroscopy instrument for rapid identification of solid materials based on elemental analysis. The NanoLIBS provides considerable time savings in materials identification and confirmation, improving compliance for raw material testing requirements while increasing productivity. The NanoLIBS is lightweight with a high brightness touch screen for rapid material identification giving results in seconds. NanoLIBS ID data management and reporting software for user PCs is included.

The NanoLIBS uses the minimally destructive LIBS technology to provide a spectrum with elemental information, making it ideal for identifying monatomic ionic salts such as KCl and NaCl without requiring reagents or the lengthy sample preparation of destructive laboratory methods. With its intuitive user interface and advanced algorithms, it provides users a quick and reliable pass/fail result.

Time Savings – user-friendly software allows even non-technical users to quickly take a sample, press a tablet, and scan to get a result.

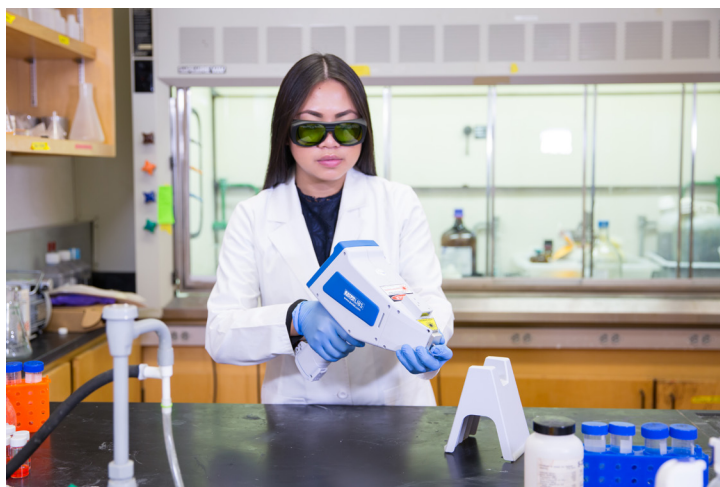
Safety – no need for reagents while facilitating 100% incoming raw material identification, protecting employees as well as customers.

Accurate and Traceable – established elemental analysis technology with 21 CFR Part 11 compliant software gives users confidence in their results. Performance verification sample and test procedures are included.

Optimized ID - optimized for unambiguous identification of the most popular monatomic salts: KBr, KCl, KI, NaBr, NaCl, CaCl_2 , and MgCl_2 .

Incoming raw material identification of monatomic salts such as used for:

- **Liquid products**
- **Injectable solutions**
- **Intravenous preparations**
- **Dialysate solutions**

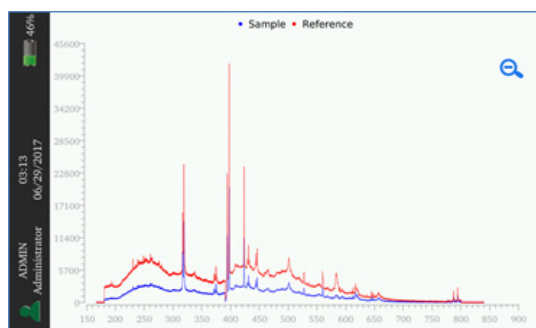
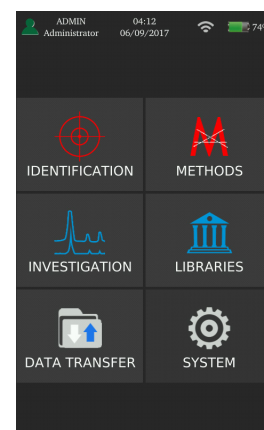


Software

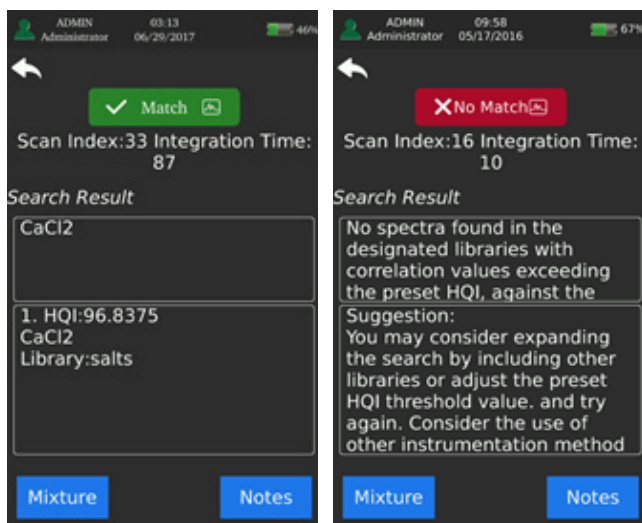
State-of-the-Art Identification Software

The NanoLIBS is operated using B&W Tek's proprietary NanoLIBS OS (LOS) software. LOS provides an intuitive workflow for identification and investigation, method and library development, and data transfer. Results are clearly displayed and can be reviewed on the easy-to-use touchscreen interface. The NanoLIBS ID software with a secure database is designed for use on PCs for data and methods management, allowing customers to review data, generate reports, export data, and integrate with their LIMS system. It includes report e-signatures and a full audit trail. The NanoLIBS ID and NanoLIBS OS software packages are 21CFR part 11 compliant. IQ/OQ documentation and services are available.

The NanoLIBS provides secure Wi-Fi and Ethernet synchronization capabilities with network terminals in order to optimize time and resources. NanoLIBS ID is capable of data and report transfers in order to centralize information (such as methods, final reports, and audit trails) in general servers.



Device	SN	Scan Index	User Name	Date and Time	Result	Product Name	Matched Sample Name
ZNSLPT1	101	NA	2017-06-30 05:47:22	Pass(0.266)	NaBr	NaBr	
ZNSLPT1	100	NA	2017-06-30 05:48:40	Pass(0.3916)	NaBr	NaBr	
ZNSLPT1	99	NA	2017-06-30 05:45:54	Pass(0.9997)	NaBr	NaBr	
ZNSLPT1	98	NA	2017-06-30 05:42:02	Pass(0.9997)	NaBr	NaBr	
ZNSLPT1	97	NA	2017-06-30 05:44:04	Fail(0.001243)	NaBr	NaBr	
ZNSLPT1	96	NA	2017-06-30 05:43:00	Fail(0.164E-07)	NaBr	NaBr	
ZNSLPT1	95	NA	2017-06-30 05:42:01	Fail(0.00224)	NaBr	NaBr	
ZNSLPT1	94	NA	2017-06-30 05:41:25	Pass(0.0939)	NaBr	NaBr	
ZNSLPT1	93	NA	2017-06-30 05:40:42	Pass(0.2094)	NaBr	NaBr	
ZNSLPT1	92	NA	2017-06-30 05:40:19	Pass(0.9917)	NaBr	NaBr	
ZNSLPT1	91	4700.0%	2017-06-30 10:00:00	Fail(0)	NaBr	NaBr	



Specifications:

Excitation Wavelength	1000-1100 nm
Laser Safety Class	3B
Spectral Range	180-800nm
Display	3.7" color touchscreen; glove operable
Barcode Reader	Linear and 2D standards
Software	NanoLIBS OS (embedded), NanoLIBS ID (PC)
Data Formats	.txt, .csv, .spc
Connectivity	Wi-Fi, Ethernet
Battery	Rechargeable Li-ion, >4 hrs operation
AC Adapter	Output: DC 12 V, 2A minimum
Weight (including battery)	3.9 lbs (1.8 kg)
Size	10.4 in x 3.9 in x 12 in (265 mm x 100 mm x 304 mm)
Operating Temperature	0 - 40°C
Storage Temperature	-30°C to +60°C



The NanoLIBS laser complies with 21CFR pt. 1040.10