

## Handheld LIBS for detection of alloys low content aluminum Si and the elements before Mg

### Our Product Introduction

for more products please visit us on [spectralanalyser.com](http://spectralanalyser.com)

#### Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE ISO9001
- Model Number: LB1000S
- Minimum Order Quantity: 1PC
- Price: Negotiable
- Packaging Details: 1PC/BOX
- Delivery Time: 30 working days
- Payment Terms: T/T
- Supply Ability: 20 PCS PER MONTH



#### Product Specification

- Spectral Range: 180nm ~ 460nm
- Laser Wavelength: 1535nm
- Laser Safety: Class1, The Lowest Risk Among All The Laser Classes
- Brand Library: 400+, Can Be Added Or Edited
- Communication Mode: 4G,Bluetooth,WIFI
- Working Temperature: -10 ~ +40
- Memory: 16GB
- Continuous Working Time: 8 Hours
- Highlight: **Lightweight Handheld Elemental Analyzer ,  
Handheld Elemental Analyzer ISO9001 Certified,  
CE Certified portable element analyzer**



#### More Images



## Product Description

Handheld LIBS for detection of alloys low content aluminum Si and the elements before Mg

### *Handheld LIBS Element Analyzer*

Make element analysis simpler,  
more efficient, accurate, and safer!

# LB1000S



The use of 1535nm CLASS 1 eye-safe lasers makes this LIBS Elemental Analyzer safe and worry-free. It eliminates the hidden dangers of X-ray ionizing radiation, making it a safe choice for metal detection applications.

With an approximate weight of 1.9kg, this Handheld Element Analyzer is easy to carry around, making it a Portable LIBS Analyzer. Its compact size and lightweight design make it an ideal choice for on-site inspections, providing accurate and reliable results without the need for a laboratory setting.

# Product Characteristics



## Safe and worry-free

Using 1535nm CLASS 1 eye-safe lasers completely eliminates the hidden dangers of X-ray ionizing radiation. The externally limited device is carefully designed to effectively prevent laser misfiring, ensuring the safety of every user.

## Efficient and prompt

Whether it's thin sheets, large blocks, lines, or particles, we can quickly respond to various shapes of metals. Detection results can be issued within 5 seconds on site, making your workflow smoother without any waiting.

## Intelligent recognition

Automatically identify the type of metal matrix to avoid human error and make the detection results more accurate. Additionally, the device integrates Beidou positioning, 4G/5G, and WIFI networking capabilities, allowing you to upload detection data to the business system in real-time regardless of your location.

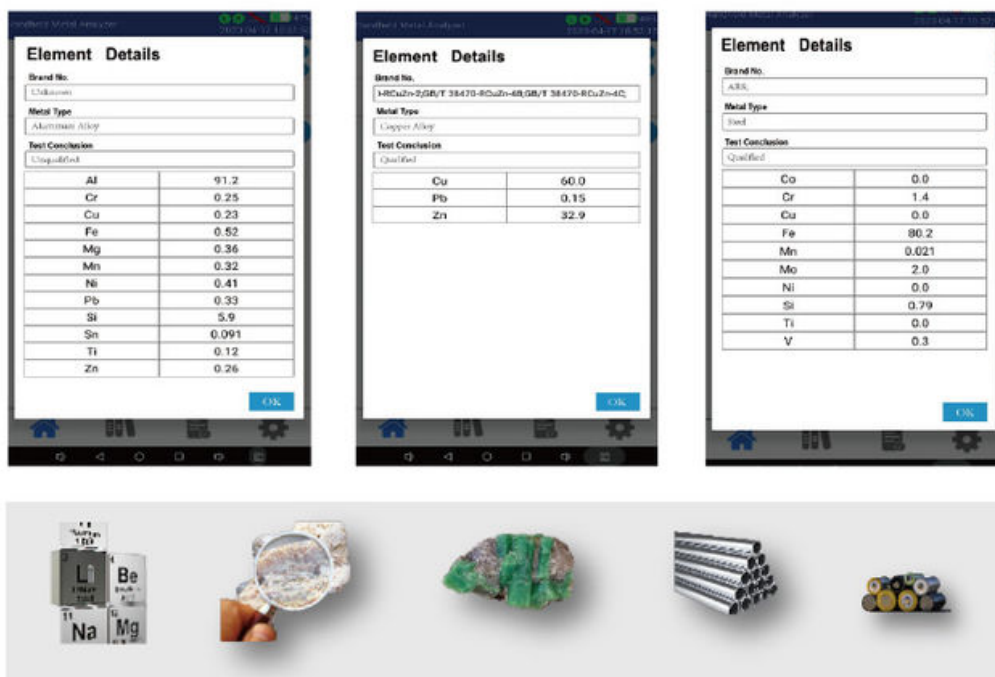
## Accurate and reliable

With full-element detection capabilities, it also demonstrates excellent detection results for light elements such as Al, Mg, and Si. This meets the precise analysis requirements of various industries, providing strong support for your business.

## Wide compatibility

Capable of detecting aluminum-based, copper-based, and iron-based matrices, it can perform quantitative analysis of various alloy elements such as Cr, Ni, Ti, V, Mn, Mg, etc. We also provide matrix customization services to meet your specific needs.

- It can be used for grade identification and element analysis in the recycling of scrap steel, scrap aluminum, and other recycled metals, helping customers achieve efficient utilization of recycled metal resources and enhance the value of recycled metals.
- It can play a role in the incoming inspection of recycled metals, control of critical processes during smelting, and material reliability identification (PMI), ensuring the quality of incoming raw materials and outgoing metal products.
- Used in mineral exploration, it helps users quickly understand the abundance of ores and detect the ore grade during mining, reducing dependence on minefield laboratories and improving the ability to control underground ore grade.



### Technical Highlights:

- Safe and worry-free:** Using 1535nm CLASS 1 eye-safe lasers completely eliminates the hidden dangers of X-ray ionizing radiation. The externally limited device is carefully designed to effectively prevent laser misfiring, ensuring the safety of every user.
- Efficient and prompt:** Whether it's thin sheets, large blocks, lines, or particles, we can quickly respond to various shapes of metals. Detection results can be issued within 5 seconds on site, making your workflow smoother and without any waiting.
- Intelligent recognition:** Automatically identify the type of metal matrix to avoid human error and make the detection results more accurate. Additionally, the device integrates Beidou positioning, 4G/5G, and WIFI networking capabilities, allowing you to upload detection data to the business system in real time regardless of your location.
- Accurate and reliable:** With full-element detection capabilities, it also demonstrates excellent detection results for light elements such as Al, Mg, and Si. This meets the precise analysis requirements of various industries, providing strong support for your business.
- Wide compatibility:** Capable of detecting aluminum-based, copper-based, and iron-based matrices, it can perform quantitative analysis of various alloy elements such as Cr, Ni, Ti, V, Mn, Mg, etc. We also provide matrix customization services to meet your specific needs.



## Specifications:

Detection Alloy Matrix	Aluminum based elements: Al,Si,Fe,Cu,Zn,Mg,Mn,Ni,Cr,Ti,Pb,Sn Iron based elements: Fe,Cr,Ni,Mn,si,Ti,Cr,Mo,V,Co Copper based elements: Cu,Zn,Mn,Al,Ni,Pb,Sn,Fe
Spectral range	180nm ~ 460nm
Laser wavelength	1535 nm, much safer for human eyes
Laser safety	Class1, the lowest risk among all the laser classes
Display screen	5.0-inch capacitive touch screen
Memory	16Gb
Working environment	Temperature: -5 to 40 . Humidity: ≤95%RH, no condensation
Sample types	Bulk solids, cylinders, sheets, wires with a diameter of 1mm or larger,thin slices, large blocks, lines, particles
Communication mode	4G,Bluetooth,WIFI
Operating time	8 hours

1	Aluminum based		
Main Element	LOD (ppm)	LOD %(Min)	LOD %(Max)
Fe	2000	0	1
Si	500	0	8
Zr	2000	0	8
Pb	2000	0	1
Cu	500	0	10
Zn	1000	0	2
Mn	1000	0	0.1
Ni	500	0	0.1
Ti	500	0	0.1
Mg	500	0	18
Sr	500	0	0.1
Sn	1000	0	0.1
Cr	500	0	0.1
Sc	500	0	0.1
Be	20	0	0.01
Ag	500	0	0.5
Al		Balance	Balance

2	Copper based		
Main Element	LOD (ppm)	LOD %(Min)	LOD %(Max)
Al	800	0	8
Si	1500	0	0.5
Pb	500	0	5
Zn	800	0	40
Mn	500	0	13
Ni	2000	0	28
Fe	1000	0	5
Sn	2000	0	0.5
Co	1500	0	2
Nb	300	0	0.5
Cr	800	0	1

Cu		Balance	Balance
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3	Iron based		
Main Element	LOD (ppm)	LOD %(Min)	LOD %(Max)
V	1000	0	2
Al	1000	0	1
Si	5000	0	3
Cu	3000	0	3
Co	1500	0	13
Mn	1000	0	22
Ni	5000	0	40
Ti	1000	0	1
Mo	1000	0	6
Cr	5000	0	22
Fe		Balance	Balance

### Applications:

The LIBS Elemental Analyzer is efficient and prompt as detection results can be issued within 5 seconds on site, making your workflow smoother and without any waiting. It weighs approximately 1.9kg with battery and has a continuous working time of 8 hours. It is an accurate and reliable product with full-element detection capabilities, including excellent detection results for light elements such as Al, Mg, and Si.

- Recycled metal recovery
- Utilization of recycled metals
- Scrap metal and alloys

# Application Scenarios



*Recycled metal recovery*



*Mineral exploration*



*Utilization of recycled metals*



## Support and Services:

The Handheld Element Analyzer is a powerful tool for identifying and analyzing elements in various materials. Our product technical support team is available to assist with any questions or issues that may arise during the use of the analyzer. We provide a range of services to ensure that your analyzer is functioning properly and delivering accurate results. These services include:

Installation and setup support

Calibration and maintenance services

Training and education on proper use and handling of the analyzer

Repair and replacement services

Software and firmware updates

Our technical support team is dedicated to providing timely and effective solutions to any issues you may encounter with your handheld element analyzer. We are committed to ensuring that you get the most out of your investment and are satisfied with your purchase.

## Company Introduction:

JINSP Company Limited, abbreviated as "JINSP", is a professional supplier with over 17 years of experience in spectral detection technology products, including Raman, FT-IR, LIBS technologies, etc. After 17 years of technology accumulation, the company's core key technologies have reached the international leading position at the level, and the

cumulative number of patent applications exceeded 200.

JINSP offers over twenty spectroscopic products across various fields, including pharmaceutical and chemical industries, public security, and customs. Products are available nationwide and are exported to over 30 countries, with cumulative sales exceeding 3,000 units.

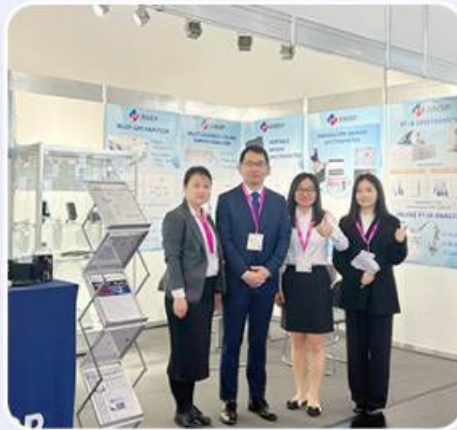
Benefit from 30+ R&D engineers, including 4 Ph.D., JINSP is deeply rooted in the field of personalized product customization, and is committed to meeting the diverse and unique needs of customers with excellent professional technology and innovative design capabilities.

## Company Profile





# Exhibition



# Certifications



## FAQ:

1. What is the model number of this handheld element analyzer?  
Model Number: LB1000S.
2. Where is this handheld element analyzer manufactured?  
Place of Origin: CHINA.
3. What is the minimum order quantity for this handheld element analyzer?  
Minimum Order Quantity: 1PC.
4. What are the payment terms for purchasing this handheld element analyzer?  
Payment Terms: T/T.
5. What is the supply ability of this handheld element analyzer?  
Supply Ability: 20 PCS PER MONTH.



**JINSP Company Ltd.**



8618620854039



phoebeyu@jinsptech.com



spectralanalyser.com

21st Floor, Building D, Tsinghua Tongfang Science and Technology Plaza, Haidian District, Beijing China