

## Handheld LIBS Element Analyzer for iron based metal elements quick analysis

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

- Laser Wavelength: 1535nm
- Laser Safety: Class1
- Laser Pulse Frequency: 1000Hz
- Continuous Working Time: 8h
- WIFI: 2.4GHz 802.11n/b/a
- Memory: 16Gb
- Working Temperature: -10 ~ +40
- Weight: Approximate Weight With Battery: 1.9kg
- Highlight: **Handheld LIBS Element Analyzer,  
Accurate Handheld LIBS Analyzer,  
1535nm Handheld LIBS Analyzer**



### More Images



## Product Description

1535nm Class 1 Eye-safe Laser Handheld LIBS(Laser Induced Breakdown Spectroscopy) Element Analyzer

# Handheld LIBS Element Analyzer

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

# LB1000S



### Product Description:

JINSP LB1000S is quick, accurate, and comprehensive! With just 5 seconds, the LB1000S, which utilizes eye-safe lasers, can reveal the precise content of all elements in the metal matrix for you. No matter what type of metal matrix you are dealing with, the element content you want to grasp will be visible! No cumbersome pretreatment is required, goodbye to complicated sample processing procedures!

Simply grind the surface of the matrix to expose a testing plane with a diameter of about 5mm, and you can easily start the analysis. Easy, simple, and efficient, allowing you to quickly obtain results on-site!

Choosing us is the perfect combination of safety, efficiency, intelligence, accuracy, compatibility, lightness, and portability! Let your inspection work become easier and more relaxed!

### 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 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.

# 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.



## 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

Weight	Approximate weight with battery: 1.9Kg
Waterproof Performance	Industrial dustproof and waterproof, suitable for onsite inspection environments
WIFI	2.4GHz 802.11n/b/a
Display Screen	5.0-inch capacitive touch screen with sensitive touch control, pollution-resistant, and 720P display for natural and clear visuals
Memory	16GB
Working Environment	Temperature: -5 to 40°C, 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
Applicable Materials	Solid substances such as metals, ores, and soil
Operating Time	Lithium-ion battery with a single battery operating time of no less than 4 hours

### Typical Applications:

- Recycled metal recovery
- Utilization of recycled metals
- Iron based metal elements

## Application Scenarios



*Recycled metal recovery*



*Mineral exploration*



*Utilization of recycled metals*

JINSP Company Limited has won the National Science and Technology Commission's Scientific and Technological Achievement Appraisal Certificate and the China Patent Excellence Award, and related products have been obtained has won authoritative awards such as the Geneva International Invention Award, the Beijing New Technology and New Product Certificate, and the "Innovation Achievement Award" of the Zhu Liangyi Analytical Instrument Innovation Award. In addition, JINSP participated in the drafting of several national and international standards, including participating in the drafting of an international standard as the only participating unit in China IEC 63085 International Standard: System of spectral identification of liquids in transparent or semitransparent containers; Drafting of two national standards: GB/T 41086-2021 "General Technical Requirements for Safety Inspection Equipment for Hazardous Chemicals Based on Raman Spectroscopy", GB/T 40219-2021 "General Specification for Raman Spectrometer".

# Company Profile









## FAQ:

### Q1: This is the first time I use it, is it easy to operate?

A1: We will send you a manual and guide video in English, it can teach you how to operate the spectrometer. Also, our technicians will offer professional technical operation meetings.

### Q2: Can you offer an operation training?

A2: Your technicians can come to our factory for training. Jinsp engineers can go to your place for local support ( installation, training, debugging, maintenance ).

### Q3: How to receive the best price in the shortest time?

A3: When you send us an inquiry, please kindly offer details with wavelength, detector, effective pixels, focal length, and so on. We will send you a quotation with details soon to your email.

### Q4: If the spectrometer has a problem in my place, what could I do?

A4: The spectrometer has a one-year warranty. If it breaks down, our technician will figure out what the problem may be, according to the client's feedback. We can repair for free within one year warranty.

### Q5: What about quality assurance?

A5: We have a quality inspection team. All goods will go through quality inspection before shipment. We can send you pictures for inspection.



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