NEXT-GENERATION FIELD ANALYSIS

Handheld LIBS Carbon Analyzer

No sample prep • No radiation • Results in 1 second

Light element detection

Li

Detects C, N, O, Li, Be, B and other light elements that XRF cannot measure. 13 matrix alloys covered.

Zero radiation hazard

0

Laser-based analysis eliminates X-ray licensing requirements. Safe for field operators.

On-site carbon testing

Test solid alloys with zero sample preparation. Instant grade verification for 400+ alloy grades.

1s	2.5	13	0	C,N,O
ANALYSIS TIME	KG WEIGHT	MATRIX ALLOYS	RADIATION	LIGHT ELEMENTS

TECHNICAL SPECIFICATIONS

LIBS-CARBON-1064

KEY APPLICATIONS

Casting Industry
Carbon steel, alloy & stainless steel grade ID

Scrap Metal
On-site sorting of ferrous & non-ferrous metals

Factory QC
Incoming & finished material inspection

Power Industry
Pipeline & tower fitting material verification

Welding Industry
Welding consumable & base material matching

KEY ADVANTAGES

Light Elements
Detects C, N, O, Li, Be, B that XRF cannot measure

No Radiation
Laser-based, no X-ray licensing required

Direct Testing
Test solids with zero sample preparation

IP54 Rated
Dust & water protected for industrial environments

TECHNICAL PARAMETERS

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Technology	Laser-Induced Breakdown Spectroscopy (LIBS)	**Laser**	Pulsed laser, thermoelectrically cooled
Spectral Range	160 to 430 nm (dual spectrometer)	**Resolution**	0.1 nm (160-235nm) / 0.2 nm (230-430nm)
Detection Limit	0.05% (element-dependent)	**Analysis Time**	1s (rapid) / 9s (high precision)
Working Distance	Contact probe, flat surface	**View Window**	UV-grade fused silica flat window
Matrix Library	13 matrix alloys, 400+ grade library	**Calibrated Matrices**	Al, Cu, Fe, Ni, Ti, Mg, Pb, Sn, Zn + more
Light Elements	C, N, O, Li, Be, B (Z < 12)	**Atmosphere**	Argon / Air (argon purge included)
Display	Color touchscreen, sunlight-readable	**Data Export**	USB, PDF / Excel report output
Weight	2.5 kg (with battery and argon capsule)	**Ingress Protection**	IP54

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