

PLS 3002

Portable LIBS



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

An economical LIBS for fast and easy alloy grade identification and chemistry without the hassle of X-ray licensing

When it comes to scrap sorting, X-ray analysis is the preferred method because of its ability to analyze a wide range of alloys. However, in states with X-ray licensing rules and regulations, XRF can be a hassle.

The 3002 utilizes laser induced breakdown spectroscopy (LIBS) for fast and easy alloy grade identification and chemistry. The platform features a powerful Class 3b laser source (1064nm, 3-6mJ) with a 50 um diameter burn spot and 50Hz laser pulse rate, including rapid sample cleaning to reduce need to prepare sample surfaces. Its integrated air pump reduces dirt buildup in analysis path. Internal sample presence sensor acts as an interlock and allows for operation of device under Class 1M conditions, subject to local LSO approval.

- A powerful Class 3b laser source (1064nm, 3-6mJ) reduces the need to prepare sample surfaces
- Includes high-resolution spectrometer for a spectral range of 190 –625 nm
- utilizes cutting edge material ID technology, offering rapid and hassle-free sorting without the need for X-ray licensing.



The unique air pump filter in PSL-3002 effectively prevents unwanted dirt from entering the testing chamber, reducing the need to constantly clean the chamber.

Precision, Versatility, and Reliability:

The 3002 also includes a high-resolution spectrometer for a spectral range of 190–625 nm. An integrated camera allows for easy viewing of tests by operators and assures good burns for curved or small pieces. A macro camera provides photo documentation of materials and reads Barcodes or QR codes for easy sample information upload. Settable, one-dimensional beam rastering for testing wires, inclusions or material veins. Weighing 4.4 lbs. with battery and 3.5” high-brightness rear-facing display for easy results viewing. Google-powered, Apps-based Android operating system provides Smartphone level simplicity and intuitive operation. WIFI and Bluetooth built in for easy connectivity to other devices.

Multiple Alloy Bases and Pre-calibrated Elements Included in the Alloy ID App

Aluminum	Li, Be, Mg, Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Zn, Zr, Pb, Bi, Ag, Sn
Copper	Be, Al, Si, Cr, Mn, Fe, Ni, Cu, Zn, Se, Ag, Sn, Pb, Bi
Magnesium	Mg, Al, Mn, Cu, Zn
Titanium	Al, Ti, V, Cr, Fe, Cu, Zr, Nb, Mo, Sn
Iron	Al, Si, Ti, V, Cr, Mn, Fe, Cu, Ni, Nb, Mo, W, Pb
Stainless Steels	Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Nb, Mo, W
Nickel	Al, Si, Ti, Cr, Mn, Fe, Co, Ni, Cu, Nb, Mo, W

Specifications:

Weight	4.19 lbs. / 1.9 kg with battery
Dimensions	10.73" x 3.35" x 10.24" / 270 x 260 x 85 mm
Display	3.5" high brightness, color touchscreen, readable in all lighting conditions. Rear facing display for easy results viewing.
Power	On-board rechargeable Li-ion battery, rechargeable inside device or with external charger, AC power
Processing Electronics	ARM Quad Cortex -A53 1.2 GHz Memory: 2 GB LPDDR3, 16 GB eMMC
Data Storage	Results storage: 32 GB SD
Connectivity	Built on Google's Android platform for real-time data exporting, including built-in WiFi (IEEE 802.11b/g/n), Bluetooth (BR/EDR+BLE), GPS and USB-C to connect to virtually any information management system
Sample Viewing	Integrated camera and laser target indicator for viewing sample before and during analysis for proper sample alignment. Includes second "macro camera" for scanning QR or barcodes and for photo-documentation and report generation
Laser Raster	On-board Y stage for rastering laser to discrete locations for targeted analysis or averaging
Atmosphere	Proprietary Opti-Purge provides an air pump and filter that helps sustain clean window during testing
Calibration Check	316 stainless steel standard for automated calibration and wavelength scale validation
Drift Correction	On-board automated drift correction software with factory-provided calibrations
Regulatory	CE, RoHS, USFDA registered. Class 3b laser. Sample sensor on board, allows for operation under Class 1 conditions, subject to local LSO approval
Spectral Range	190 – 625 nm
Calibrations	Aluminum: Li, Be, Mg, Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Zn, Zr, Pb, Bi, Ag, Sn Copper: Be, Al, Si, Cr, Mn, Fe, Ni, Cu, Zn, Se, Ag, Sn, Pb, Bi Magnesium: Mg, Al, Mn, Cu, Zn Titanium: Al, Ti, V, Cr, Fe, Cu, Zr, Nb, Mo, Sn Iron: Al, Si, Ti, V, Cr, Mn, Fe, Cu, Ni, Nb, Mo, W, Pb Stainless Steels: Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Nb, Mo, W Nickel: Al, Si, Ti, Cr, Mn, Fe, Co, Ni, Cu, Nb, Mo, W Enabled but not Calibrated Elements: Ag, Au, Cd, Cr, Co, Fe, Hf, Mn, Mo, Nb, Ni, Pb, Re, Sb, Sn, Stainless, Ta, Ti, V, W, Zn, Zr
Security	Password protected; multi-user support with configurable access settings

HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

Our Products & Technologies



UV-TS 2080



Infra FTIR



Optima Gas
Chromatograph
3007



Optima Gas
Chromatograph



Flash
Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Partical
Counter



Optical Emission
Spectrophotometer



STA



Semi Auto Bio
Chemistry Analyzer



LCMS



GCMS



XRD



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



PCR/Gradient PCR/
RTPCR



TOC
Analyzer



Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

Regulatory compliances



Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



Analytical
Foundation

1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

Reach us @



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