

PRODUCT CATALOGUE



Established 1987

ARUN
TECHNOLOGY
MADE TO MEASURE

ABOUT US

Pioneering Metals Analysis

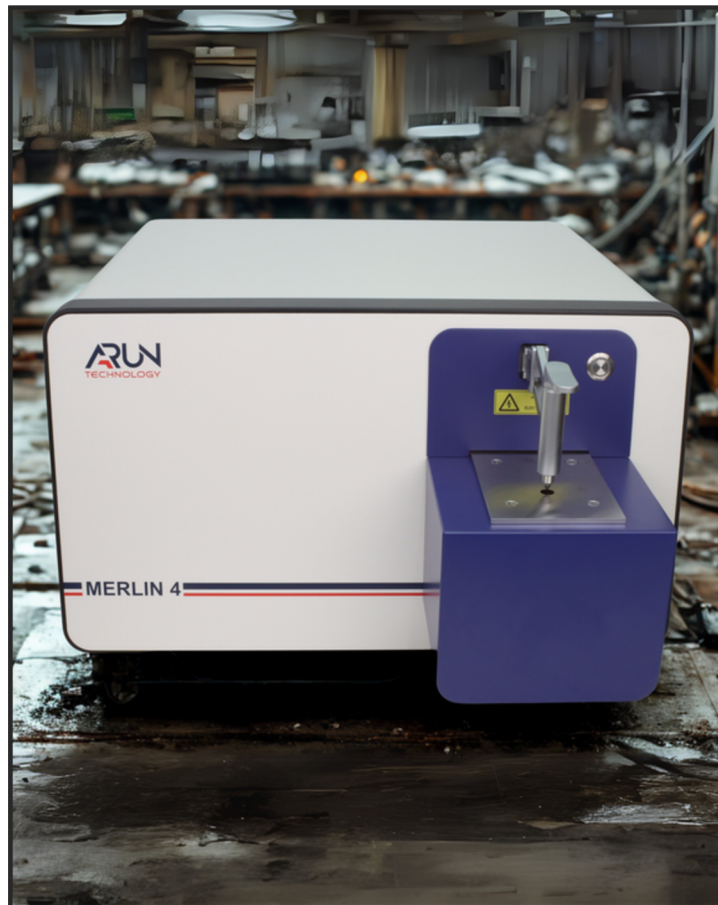
Since the 1980s, ARUN Technology has led the way in metals analysis, developing the world's first CCD-based metals analyser.

Today, we continue to innovate with cutting-edge CMOS detector desktop OES spectrometers and handheld LIBS instruments, trusted by professionals worldwide.

As a centre of excellence for sales, marketing, applications, technical support and service, we deliver high-performance solutions that enhance quality control, research and manufacturing.

We are a proud British provider of world-class analytical instruments.

At ARUN Technology, we don't just analyse metals – **we redefine metals analysis.**



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Certificate Number: 1122
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ISO 45001, ISO 27001



2819



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INDUSTRIES



MADE FOR MODERN FOUNDRIES

Manufacturers rely on foundries to supply alloys that meet strict quality standards - requiring precise, dependable analysis of metal composition.

For nearly 40 years, ARUN Technology has supported the metal casting industry with advanced Optical Emission Spectrometers, trusted worldwide for fast, accurate results from basic grade checks to trace element analysis. Bespoke calibrations for steels, aluminium alloys, and other metals ensure optimal performance across a wide range of materials.



FAST. ACCURATE. READY FOR SCRAP.

The scrap and recycling industries need rapid, reliable metal sorting. ARUN Technology's handheld solutions deliver quick inspections and Positive Material Identification (PMI) to streamline high-volume processing. The CALIBUS is a laser-induced breakdown spectrometer (LIBS) — the first CMOS-based LIBS analyser to measure carbon in ferrous materials. It's the perfect instrument for QA/QC, manufacturing, petrochemicals, and metal recycling.



BUILT FOR THE DEMANDS OF OIL & GAS

The oil and gas industry relies on strict quality control of steels and cast irons used in pipelines, vessels, and rigs.

With almost 40 years of industry expertise, Arun Technology's OES instruments offer seamless integration, reliable results, and bespoke calibrations for stainless steels, cast irons, tool steels, and more.

INDUSTRIES



TRUSTED BY THE AEROSPACE INDUSTRY

The aerospace sector demands tight control of tolerances in incoming materials to ensure safety and compliance. ARUN Technology's Optical Emission Spectrometers (OES) deliver fast, accurate metal analysis with intuitive software and seamless integration into inspection workflows.

Custom calibrations are available for steels, aluminium alloys, and other metal bases. For in-line inspections, ARUN also offers CALIBUS – the industry-leading handheld LIBS, delivering instant results with minimal sample surface damage. It's the first of its kind to analyse carbon in steels.

**"FROM ROAD TO SKY –
POWERING MATERIAL
CONFIDENCE IN AUTOMOTIVE
AND AEROSPACE
PRODUCTION."**

DRIVING QUALITY IN THE AUTOMOTIVE INDUSTRY

Precision and reliability are critical in automotive manufacturing, where strict material control underpins vehicle safety, performance, and compliance. ARUN Technology's OES deliver fast, highly accurate alloy analysis, helping manufacturers maintain the highest standards throughout production.

Designed for seamless integration into existing quality control workflows, our systems feature intuitive software and user-friendly operation. Custom calibrations are available to support a broad range of metals, including steels, aluminium alloys, and other key automotive materials — ensuring confidence in every component.





CALIBUS (LIBS)

CMOS-BASED LIBS ANALYSER

The CALIBUS is a series of Laser-Induced Breakdown Spectrometers (LIBS) from ARUN Technology. The CALIBUS 5 made industry history as the first CMOS-based LIBS analyser on the market capable of measuring carbon in ferrous metals – a breakthrough that redefined what handheld analysis could achieve.

Offering fast, reliable results, the CALIBUS series is an ideal analytical solution for QA/QC, metallurgical manufacturing, machining, petrochemical industries, scrap metal and recycling.

CALIBUS (LIBS)

"ADVANCED ANALYSIS. COMPACT DESIGN.
PROVEN PERFORMANCE."

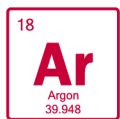


PRODUCT SPECIFICATIONS



HIGH-SPEED, HIGH-ACCURACY RESULTS

Thanks to advanced CMOS technology, the CALIBUS is capable of detecting a wide range of elements with exceptional accuracy and high repeatability. With analysis times as fast as one second, it delivers rapid, dependable results—ideal for high-throughput environments where precision matters.



ENHANCED PERFORMANCE WITH ARGON PURGE TECHNOLOGY

The CALIBUS 5 features advanced argon purge technology, which significantly reduces background noise and improves elemental detection capability—especially for light elements like carbon.

Each argon canister supports up to 100 burns. The portable argon bottle, supplied with the CALIBUS instrument, can refill the canister up to five times—enabling up to 500 continuous on-site tests without interruption.



INTUITIVE, INTERACTIVE INTERFACE

The CALIBUS features a user-friendly Android interface, making it as simple and familiar to operate as a smartphone. Its 5-inch high-resolution touchscreen offers seamless navigation and a smooth, responsive experience—even in demanding industrial environments.



NO RADIATION CERTIFICATION REQUIRED

As a laser-induced spectrometer (LIBS), CALIBUS eliminates the need for costly and time-consuming radiation safety training or certification—reducing overheads and simplifying deployment for your team.



BOOST PRODUCTIVITY WITH CALIBUS

With rapid analysis times, minimal setup, and easy operation, CALIBUS empowers users to complete more tests per day – making it the perfect instrument for fast-paced environments, in-line inspections, and large-scale inventory management



ROBUST AND DURABLE BY DESIGN

Built for tough environments, CALIBUS is splash and dust-resistant, with measurement optics protected by a durable glass window—ensuring long-lasting performance in the field.



VERSATILE ALLOY IDENTIFICATION WITH CALIBUS

CALIBUS enables fast, reliable analysis across a wide range of alloy types—including aluminium, magnesium, titanium, cobalt, chromium, nickel, and copper alloys, as well as stainless steels, tool steels, low alloy steels, and more.

PRODUCT SPECIFICATIONS



WORLDWIDE COMPATIBILITY

Engineered for global operations, CALIBUS is fully compatible with all international power supplies and current configurations, ensuring seamless integration into facilities around the world.



ALL-DAY BATTERY LIFE

CALIBUS delivers up to 8 hours of operation on a single charge when analysing one sample every 5 seconds. For extended use, two rechargeable batteries are included with the instrument.

COMPARISON	CALIBUS AI	CALIBUS 3	CALIBUS 5
Argon Flushed	No	No	Yes
Number of Optics	2	2	3
Bases Included as Standard	Al	Fe, Al, Cu	Fe, Al, Cu
Carbon Detection in Fe	N/A	No	Yes

STANDARD ACCESSORIES

- Waterproof and shockproof case
- 2 Lithium Ion batteries
- Charging dock for batteries
- Nylon wrist band and over the shoulder strap
- Memory stick (64G)

"THE CALIBUS IS A CMOS-BASED LIBS ANALYSER—PIONEERING CARBON MEASUREMENT IN FERROUS METALS AND BUILT FOR FAST, RELIABLE ANALYSIS ACROSS THE METALS, RECYCLING AND PETROCHEMICAL INDUSTRIES."



PERFORMANCE OVERVIEW

ACCURACY

Reliable results, every time.

With advanced LIBS technology, CALIBUS delivers precise, repeatable elemental analysis - reducing user error through its intuitive point-and-shoot design and providing dependable data you can trust across a wide range of alloys.



STRENGTH

Built to perform in tough environments.

Engineered for field use, CALIBUS is splash and dust-proof (IP54 certified), delivering long-lasting performance in even the most demanding industrial environments.



SPEED

Results in seconds, productivity that lasts.

With analysis times as fast as one second and a full-day battery life, CALIBUS keeps your operations moving. Its efficient performance and minimal sample impact make it a high-speed tool with real-world value.

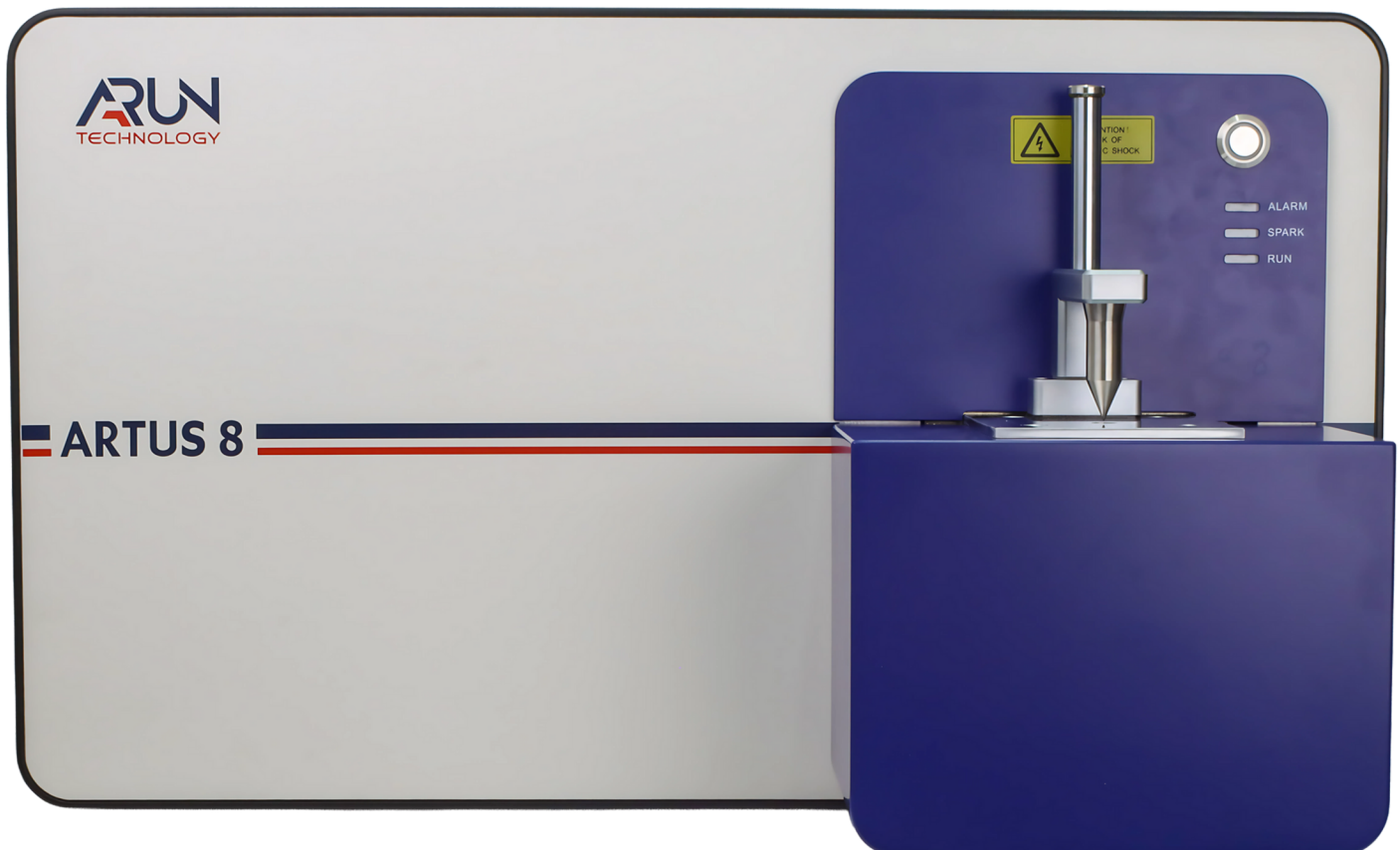




ARTUS 8 (OES)

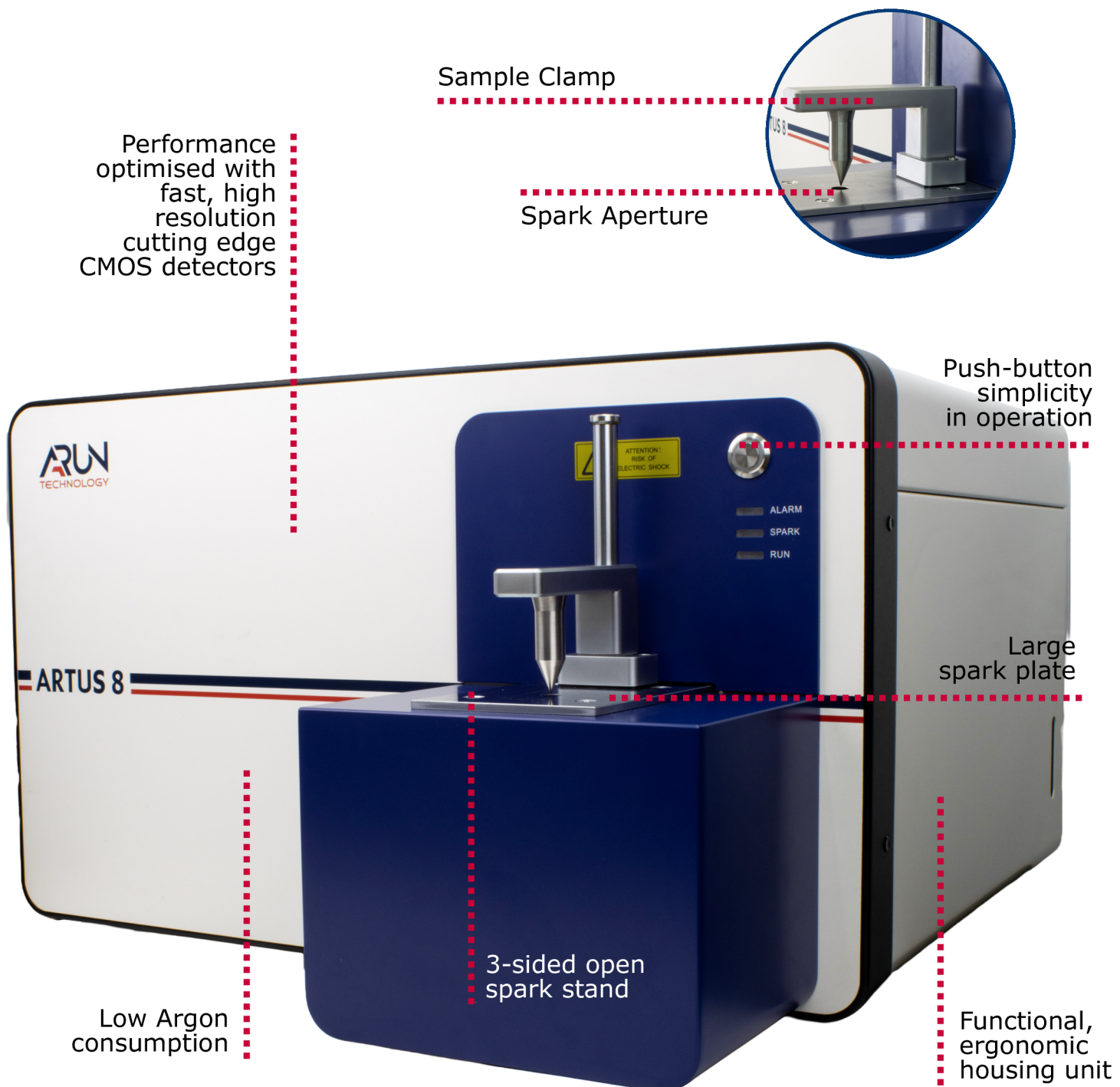
HIGH PERFORMING OES METAL ANALYSER

The ARTUS 8 fulfils the requirement of providing fast, precise and accurate analyses. It is one of the most powerful and reliable spectrometers on the market, offering a bespoke range of analytical programs including steels, aluminium, copper, and other alloys. It offers the latest CMOS detector technology, providing accurate results with high repeatability.



ARTUS 8 (OES)

"HIGH-PERFORMANCE OES METAL ANALYSIS WITH FAST, PRECISE, AND REPEATABLE RESULTS."

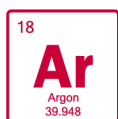


PRODUCT SPECIFICATIONS



LARGE SPARK PLATE FOR CONTINUOUS, STABLE ANALYSIS

The ARTUS 8 is equipped with a generously sized, 3-sided open spark stand designed for easy sample placement and secure positioning. Featuring a corrosion-resistant surface and an XY-sample clamp, it ensures consistent sample alignment and reliable results. Its robust, heat-dissipating construction allows for continuous 24-hour operation, delivering stable, uninterrupted analysis even in high-throughput environments.



LOW ARGON CONSUMPTION FOR EFFICIENT OPERATION

The ARTUS 8 is engineered to minimise argon use, consuming just 5 L/min during burns, reduced to 0.5 L/min in standby. In extended idle periods, it enters sleep mode, using only 0.1 L/min for maximum efficiency.



USER-FRIENDLY SOFTWARE FOR SEAMLESS OPERATION

The intuitive ARUN Analytical software makes the ARTUS 8 easy to use with minimal training. A single button triggers analysis, with instant results shown on the main interface. Grade matching, quality control, and data export are all accessible from the toolbar, while advanced functions are available through password-protected admin and engineer profiles.



SELF-DIAGNOSTIC SYSTEM FOR REDUCED DOWNTIME

The built-in self-diagnostic system alerts users to potential issues such as board malfunctions or low argon pressure. Quick identification of faults helps minimise manufacturing downtime and maintains consistent performance.



RELIABLE QUALITY CONTROL ACROSS INDUSTRIES

Quality control and assurance are key to business success. The ARTUS 8 supports every stage—from incoming material checks and in-process testing to final inspections and independent lab analysis. Trusted across steel manufacturing, aerospace, automotive, aluminium extrusion, and carbon steel sectors, it features specialised adapters for small or irregular samples and an extensive grade library for instant alloy identification.



BESPOKE CALIBRATIONS FOR DIVERSE ALLOY TYPES

The ARTUS 8 is engineered for flexibility, offering bespoke calibrations tailored to a broad spectrum of base materials and alloy types, including steels, aluminium, copper, nickel, and more. This adaptability ensures accurate, repeatable results across a wide range of applications – from metallurgical quality control to advanced research and development. Whether you're working in production, inspection or laboratory environments, the ARTUS 8 delivers the precision you need with the customisation your processes demand.

PRODUCT SPECIFICATIONS



WORLDWIDE COMPATIBILITY

Designed for seamless global operation, the ARTUS 8 is fully compatible with all international power supplies and current configurations.



CUTTING-EDGE CMOS TECHNOLOGY FOR HIGH-RESOLUTION DETECTION

Equipped with advanced CMOS detectors, the ARTUS 8 delivers high-resolution spectral detection for precise and accurate elemental analysis.



TRACE ELEMENT DETECTION AT ULTRA-LOW LIMITS

The ARTUS 8 achieves exceptionally low detection limits, enabling accurate identification of trace elements.

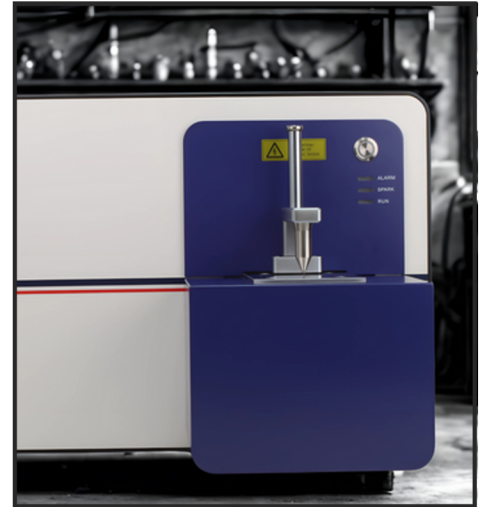


Optical System	Paschen-Runge
Detector	CMOS
Wavelength Range	140-680nm (Ultimate) 170-680nm (Standard) 210-680nm (Visible)
Power Supply	Line input 90 or 260 volts AC 50 - 60 Hz
EMC	IEC61000-4-2, IEC61000-4-4, IEC61000-4-5
Argon Purity	99.998% Minimum 99.999% Ideal
Argon Flow	When burning - 5L/min Standby mode - 0.5L/min Sleep mode - 0.1/min
Software	Intuitive software for simple routine operation. Various user levels for secure and task-specific operations.
Dimensions	72x44x81cm
Weight	80kg

PERFORMANCE OVERVIEW

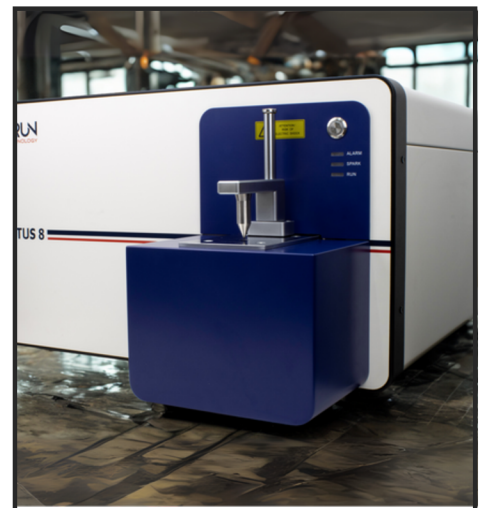
ACCURACY

The ARTUS 8 delivers outstanding analytical precision thanks to cutting-edge CMOS detector technology and bespoke calibrations across a wide range of alloys. Its ultra-low detection limits ensure trace elements are accurately identified, supporting even the most demanding quality control requirements.



STABILITY

Engineered for continuous performance, the ARTUS 8 features a heat-dissipating spark stand and self-diagnostic system, ensuring 24-hour operation with minimal downtime. Its corrosion-resistant components and intelligent argon management maintain consistent results over time, even in challenging industrial environments.



SPEED

Designed for efficiency, the ARTUS 8 combines intuitive software with rapid analysis capability. A single button triggers measurement, with instant results and grade identification displayed on-screen. Low standby argon consumption and automatic sleep mode further enhance operational speed without compromising precision.

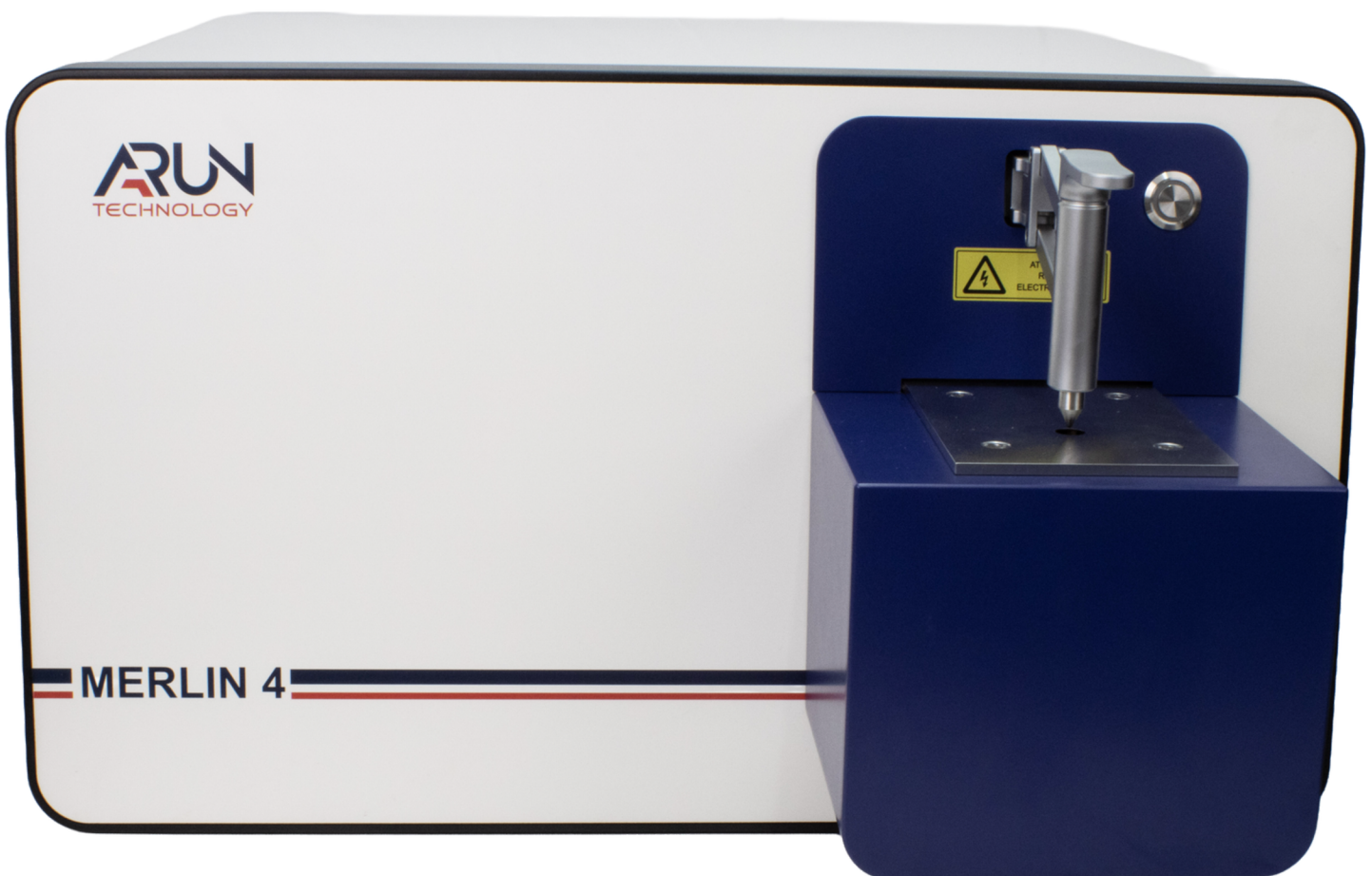




MERLIN 4 (OES)

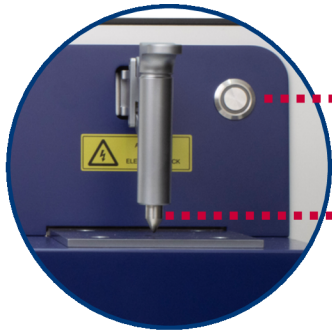
SMALL DESIGN BIG ON PERFORMANCE

The MERLIN 4 is a mid-range CMOS spectrometer widely used within the metal production, processing, and recycling industries. Quality Control and Assurance are essential to making your business successful. The MERLIN 4 is the ideal companion for incoming material, in-process testing and final quality inspection.



MERLIN 4 (OES)

"PRECISION YOU CAN TRUST,
PERFORMANCE YOU CAN RELY ON"



Push-button simplicity
for hassle-free operation

Clamp

Performance
optimised with
fast, high
resolution
cutting edge
CMOS detectors

User friendly software

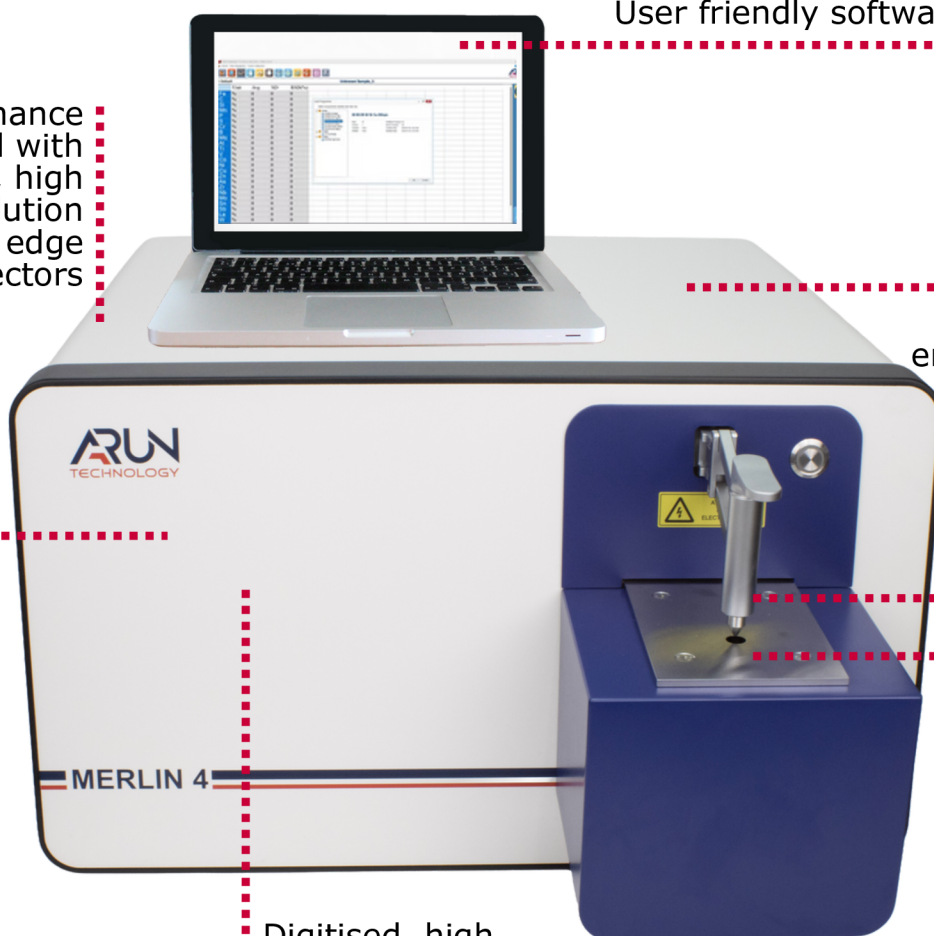
Functional
ergonomic design

Low Argon
consumption

Large
spark plate

3-sided open
spark stand

Digitised, high
precision generator

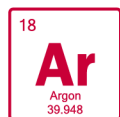


PRODUCT SPECIFICATIONS



LARGE SPARK PLATE

This 3-sided open spark stand with XY-sample clamp has a corrosion resistant surface. Its heat dissipation composition ensures 24 hours of uninterrupted and stable analysis.



LOW ARGON CONSUMPTION

The MERLIN 4 is designed to minimise argon consumption - 5L/min flow rates during burns are reduced to 0.5L/min during standby. In extended idle periods, it enters sleep mode and only consumes 0.1L/min of argon.



USER FRIENDLY SOFTWARE

The intuitive and simple to use ARUN Analytical software package makes the MERLIN 4 instrument accessible to users with minimal training required - analysis is triggered at the press of a button, with results displayed instantly on the main interface. Grade matching, quality control and data export are all available directly from the toolbar, with advanced features accessible through password protected admin and engineer user profiles.



SELF-DIAGNOSTIC SYSTEM

The self-diagnosing system will allow the user to see any issue that may arise such as a board malfunction or low argon pressure. Being able to quickly diagnose any matters will reduce manufacturing down time.



CMOS DETECTOR TECHNOLOGY

Advanced CMOS detector technology lies at the heart of MERLIN 4, delivering high-resolution spectral detection with exceptional speed, sensitivity, and accuracy – even in demanding conditions.



CONTROLLED OPTICS, CLEAR RESULTS

The sealed optical system maintains constant pressure and temperature settings for the optimal detection environment, and is self-purified to prevent moisture build up.



CALIBRATED FOR VERSATILITY

Each MERLIN 4 unit can be configured with bespoke calibrations to suit a wide range of metal bases and alloy types, ensuring precise and reliable results across diverse applications and industry requirements.

PRODUCT SPECIFICATIONS



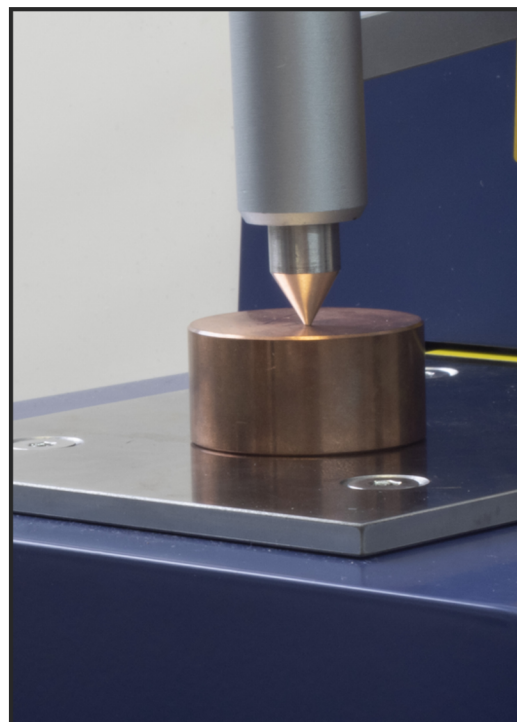
WORLDWIDE COMPATIBILITY

Designed for global use, MERLIN 4 is fully compatible with all international power supplies and current configurations, making it a truly flexible solution for operations anywhere in the world.



GRADE LIBRARIES FOR SMARTER INSPECTION

Extensive built-in grade libraries, combined with intelligent software-based quality control features, streamline the inspection process and support faster, more accurate decision-making in the field.

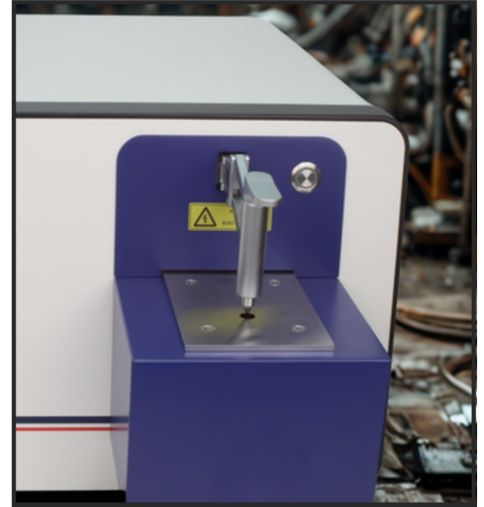


Optical System	Paschen-Runge
Wavelength Range	175-521nm (Ultra) 205-521nm (Visible)
Power Supply	Line input 90 or 260 volts AC 50 - 60 Hz
EMC	IEC61000-4-2, IEC61000-4-4, IEC61000-4-5
Working Temperature	10° to 35°C
Operating Humidity	20-80%
Argon Purity	99.998% Minimum 99.999% Ideal
Argon Flow	When burning - 5L/min Standby mode - 0.5L/min Sleep mode - 0.1/min
Software	Intuitive software for simple routine operation. Various user levels for secure and task-specific operations.
Dimensions	65x39x79cm
Weight	67kg

PERFORMANCE OVERVIEW

ACCURACY

With powerful hardware and unique software algorithms, the MERLIN 4 delivers exceptional precision and accuracy in elemental analysis across a wide range of materials. Enjoy hassle-free sample handling for smooth, efficient operation.



STABILITY

Optimised Paschen-Runge configuration with thermal stabilisation and insulation ensure maximum analytical stability. A maintenance-free digital source delivers ultra-stable spark generation.



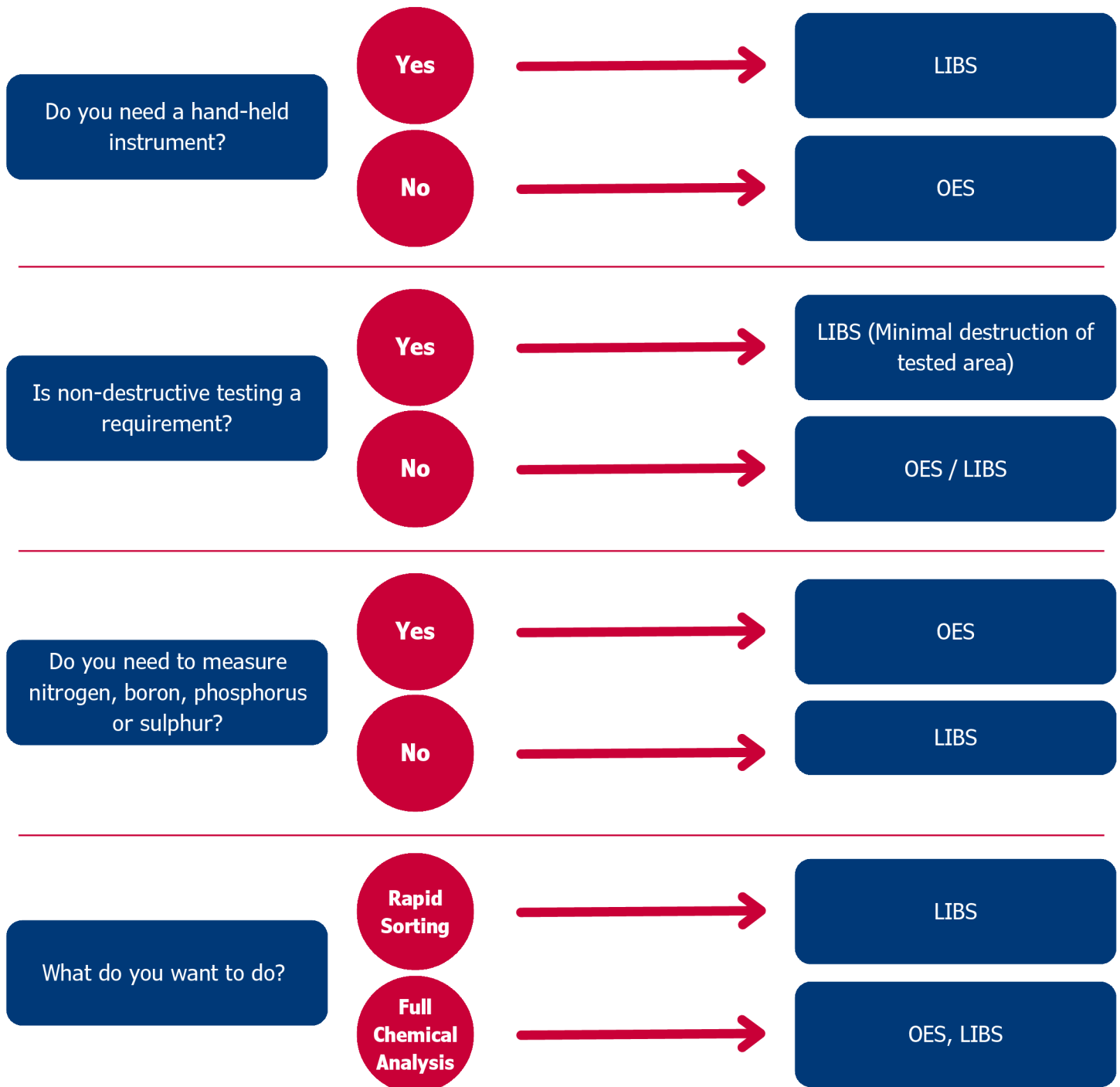
SPEED

Experience fast measurements with high resolution and exceptional data quality. Ultra-fast readings, combined with multiple state-of-the-art CMOS sensors, delivers outstanding efficiency of spectral detection.





OES OR LIBS ?



OES and LIBS are both used for accuracy and precision of results in elemental analysis.

OES offers high-precision results, ideal for lab-based analysis.

LIBS, provides fast, portable testing with minimal sample prep. Perfect for rapid, on-site alloy verification.

OUR SERVICE COMMITMENT

At ARUN Technology, we take pride in delivering exceptional customer care - before, during, and after your purchase.

Our dedicated ARUN Service Support team is here to help protect and maintain your spectrometers, providing reliable coverage to prevent faults and minimise downtime. ARUN Technology is committed to keeping your operations running smoothly with expert after-sales care.

Our services include:



ANNUAL PREVENTATIVE MAINTENANCE

Protect the long-term performance of your OES instrument with regular servicing and expert support.



COMPONENT REPLACEMENT & INTERNAL CLEANING

Key optical components and replenishable parts are replaced before degradation, while internal cleaning prevents contamination and unplanned downtime.



MATRIX CALIBRATION CHECKS

Performed by experienced engineers using certified samples to ensure accuracy. Fine-tuning is carried out to optimise key elements within your specific grades and alloys.



CERTIFICATES OF CALIBRATION

Issued after service work is completed to certify instrument performance and support compliance for auditing purposes.



TELEPHONE HELP DESK

Expert support when you need it, helping resolve issues quickly and efficiently.



CONSUMABLES & SPARE PARTS

A full range of consumables, including electrodes and spare part kits, is available to support ongoing use. Consumables and spares are ready for immediate dispatch from our UK office.



3 YEAR WARRANTY

Enjoy the peace of mind with 3 year coverage to protect your investment and avoid unexpected costs

GLOBAL DISTRIBUTION NETWORK

ARUN Technology works with trusted distributors around the world to ensure smooth installation, training, and ongoing support for your instruments. You can find official distributor details and contact information directly through the ARUN Technology website.

If you have any questions—or if you're interested in becoming a distributor—please get in touch with us at info@aruntechnology.com.

AMERICAS - Chile, Peru, Colombia, Canada, Mexico, USA, Brazil

EUROPE - Croatia, France, Italy, Poland, Ukraine, Serbia, Switzerland, Spain

MIDDLE EAST - Egypt, Iran, Turkey, Qatar

INDIA-SUBCONTINENT - India, Bangladesh

ASIA-PACIFIC & SOUTHEAST ASIA - China, Indonesia, South Korea, Malaysia, Taiwan, Vietnam

Africa - Angola, Rwanda, Mali, Congo, Senegal, Uganda, Mauritius, South Africa





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