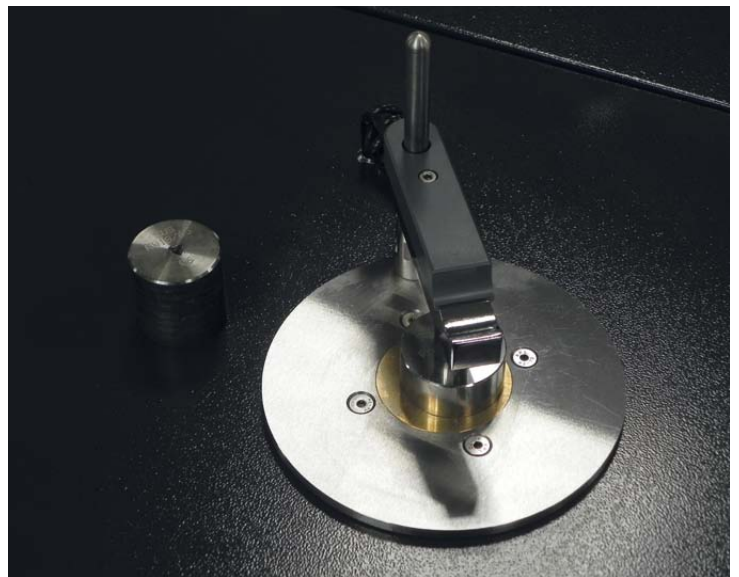
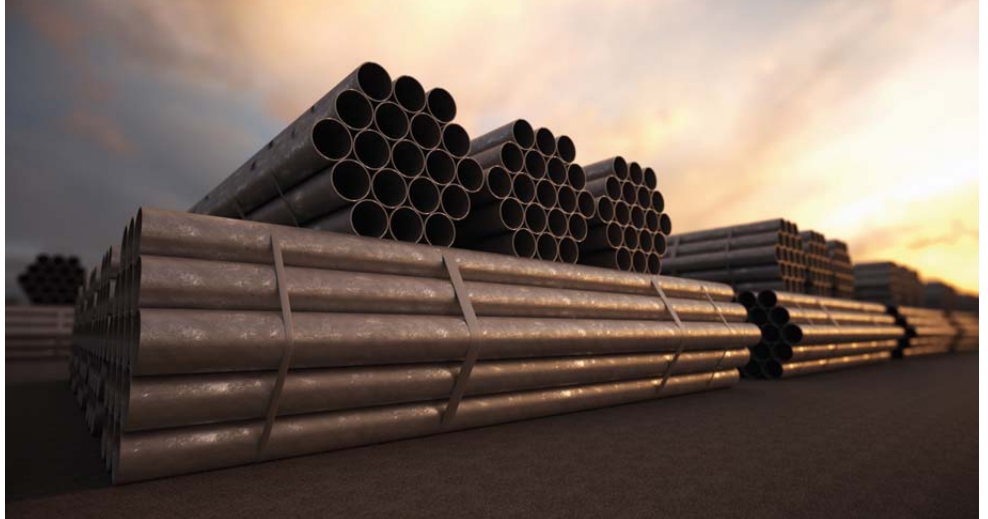


S5 Solaris Plus  
S7 Metal Lab Plus  
S9 Atlantis



LABORATORY OPTICAL EMISSION SPECTROMETERS

# About us

WATCH NOW



**GNR**, thanks to its 35 years of experience, is a worldwide market manufacturer of advanced analytical instruments, developing procedures of analysis for various applications, supplying the corresponding laboratory equipment and providing consulting and Customer support worldwide, through its well established sales and post-sale network.

**GNR** projects and manufactures Optical Emission Spectrometers (OES) and Rotating Disc Electrode Optical Emission Spectrometers (RDE-OES) for the measurement of elemental composition of metal alloys and the analysis of contaminants, additives and wear metals in oils and lubricants, coolants and hydraulic fluids.

**GNR** designs and produces X-Ray Diffractometers (XRD) and X-Ray Fluorescence Spectrometers (XRF) for the study of material structure and elemental composition for both academic and industrial applications.



GNR Head Office and Production Site is located in Agrate Conturbia (Novara), near Lago Maggiore; 20 minutes from MALPENSA Airport.

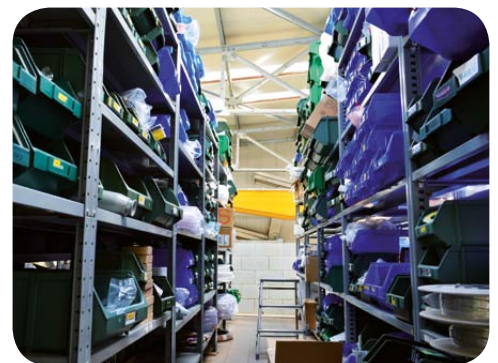
## Certified Company

Highest quality in our products and services is a core value for **GNR**.

Full commitment is dedicated to support our quality system in the overall process and continuous improvement is fundamental to guarantee GNR compliance to the internationally accepted quality management standard ISO 9001.



GNR periodically organizes at its facility courses and training for technicians and agents as well as seminars and demonstrations.



Thanks to an extensive network of agents GNR provides technical support and delivers spare parts worldwide.

In relation to the process of continuous development, GNR reserves the right to change specifications of the instruments without previous notice at any time; the real ones will always be those shown in the final order confirmation.

# S5 Solaris Plus

MULTI MATRIX OPTICAL EMISSION SPECTROMETER

WATCH NOW



**S5 Solaris Plus** is an advanced CMOS based optical emission spectrometer.

With more than 600 unit installed all over the world, **S5 Solaris Plus** (SCP) is the most popular model of GNR range of spectrometers: it offers the perfect solution for Metal Analysis: reliability and accuracy in results, superior analytical performance, ease of use and attractive price.

**S5 Solaris Plus** spectrometer represent the ideal solution to be used in any working place (Office, Laboratory, Stock, Production), thanks to the reduced dimensions and to the quality of components.

During the years, several innovative and technological advanced solutions have been introduced by GNR Research & Development which makes S5 spectrometer fully suitable not only for general-purpose applications but also to cover customer specific requirements; it is a perfect unit to perform multi-matrix analysis on both Ferrous and Non-Ferrous Alloys (Iron, Nickel, Cobalt, Titanium, Aluminium, Copper, Zinc, Lead, Tin and Magnesium).

Thanks to the method, precision and the short analysis time, **S5 Solaris Plus** represents a valid production control system in metal industry (primary alloys foundries, metal processing industries, mechanical industry) in any time during production cycle, in the case it is necessary to have a fast and accurate chemical analysis of material.

S5 SCP is able to perform both trace's analysis and day-to-day QC tests, the software **EOS®** is a powerful program with an intuitive graphic user-interface, supporting the operators and guiding them through the several phases of tests till the final printing of Analysis' Certificate.



## Technical Specifications

### S5 Solaris Plus

Applications	Fe, Al, Cu, Ni, Zn, Ti, Mg, Co, Pb, Sn Low Nitrogen in Fe Matrix Sodium / Lithium in Al Matrix Soluble and Insoluble content in Low Alloy Steel
Detector	CMOS
Optical Chamber	Equipped with Vacuum System
Alloy Database	i.e., UNI, ASTM, DIN
SW	EOS® GNR proprietary SW
Wavelength Range	130 – 900 nm
Power Supply	110/220 V AC 16 A 1 KW
Height x Width x Depth	900 x 360 x 620 mm
Weight	100 kg
Personal Computer	Optional

## Purpose

Easiness of use, low maintenance cost, very competitive price with the most advanced technological optical and electronic components for the metals producing and processing industry. Unrivalled price-performance ratio. Maximum running time, minimum downtime. Comprehensive metals database included, for fast and easy grade identification.



# S7 Metal Lab Plus

WATCH NOW



LABORATORY OPTICAL EMISSION SPECTROMETER

**S7 Metal Lab Plus** is an advanced CMOS based optical emission spectrometer.

S7 Metal Lab Plus combines ease of use and high accuracy of results. Its ergonomic and innovative design has been appreciated by many Laboratories using this Metal Analyzer for several applications across all metal industry.

**S7 Metal Lab Plus** is the perfect solution able to cover multi matrix analysis requests and at the same time granting the flexibility of easy upgrade for future needs; it is available with different configurations, able to analyze any different kind of metal alloys, Ferrous and non-Ferrous ones (Iron, Nickel, Cobalt, Titanium, Aluminium, Copper, Zinc, Lead, Tin and Magnesium).

In addition, an optional version with upgraded CMOS scientific grade is available for low nitrogen and oxygen analysis with superior analytical performances.

**S7 Metal Lab Plus** is available with different configurations which allows to perform from daily Quality Control to Trace analysis accordingly to customer's specific needs.

As an option, this model can be equipped also with an external mobile arm and pistol for testing directly on material without any preparation. New software **EOS®** is a powerful program with an intuitive graphic user-interface, supporting the operators and guiding them through the several phases of tests till the final printing of Analysis' Certificate.



## Technical Specifications

### S7 Metal Lab Plus

Applications	Fe, Al, Cu, Ni, Zn, Ti, Mg, Co, Pb, Sn Low Nitrogen in Fe Matrix Sodium / Lithium in Al Matrix Soluble and Insoluble content in Low Alloy Steel
Detector	CMOS
Optical Chamber	Equipped with Vacuum System
Alloy Database	i.e., UNI, ASTM, DIN
SW	EOS® GNR proprietary SW
Wavelength Range	130 – 900 nm
Power Supply	110/220 V AC 16 A 1 KW
Height x Width x Depth	930 x 940 x 1010 mm
Weight	160 kg
Personal Computer	Optional

## Purpose

Fast measurement times, high reliability and low operating costs for everyday analysis and total quality control with the most advanced technological optical and electronic components for the metals producing and processing industry. Excellent long-term stability, precision and accuracy. Comprehensive metals database included, for fast and easy grade identification.



Optional external arm

# S9 Atlantis

## TOP LABORATORY OPTICAL EMISSION SPECTROMETER



**S9 Atlantis** is the top range Laboratory Optical Emission Spectrometer. This is the result of 35 years of experience in developing and manufacturing optical spark emission spectrometers. It can be considered as the top laboratory metal analyzer with improved analytical performances, highly flexibility and easy to use.

**S9 Atlantis** optical system combines the specific advantages of both photomultiplier tubes and CMOS detector systems.

Manufactured with the higher quality components, S9 Atlantis is developed for any kind of analytical task. It is well suitable for routine analysis in the process control, for monitoring in quality control as well as in research and development for complex or specific analytical needs.

**S9 Atlantis** can be supplied with PMT configuration, with hybrid configuration (PMT and CMOS) and with a CMOS one according to customer requirements.

New **S9 Atlantis** Full CMOS covers the complete spectrum of elements in metal with low detection limits and state-of-the-art multi-CMOS technology. The spectrometer can mount a cooled table stand and an ultra-vacuum optic by an additional turbo-molecular pump able to grant the highest sensibility for trace elements analysis such as Nitrogen, Oxygen, Phosphorous and Boron in Steels, Copper, Aluminium and Titanium Alloys.

New software **EOS®** is a powerful program with an intuitive graphic user-interface, supporting the operators and guiding them through the several phases of tests till the final printing of Analysis' Certificate.

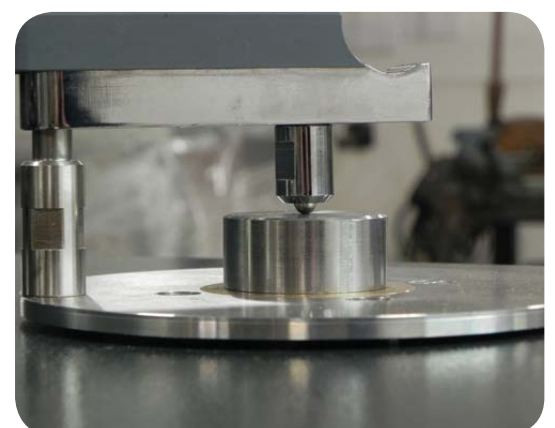


## Technical Specifications

S9 Atlantis	
Applications	Fe, Al, Cu, Ni, Zn, Ti, Mg, Co, Pb, Sn Low Nitrogen in Fe Matrix Oxygen in Cu Matrix Oxygen in Steels Sodium / Lithium in Al Matrix Soluble and Insoluble content in Low Alloy Steel Nitrogen / Oxygen / Hydrogen in Ti Matrix
Detector	CMOS
Optical Chamber	Equipped with Vacuum System
Alloy Database	i.e., UNI, ASTM, DIN
SW	EOS® GNR proprietary SW
Wavelength Range	120 – 900 nm
Power Supply	110/220 V AC 16 A 1 KW
Height x Width x Depth	600 x 1300 x 1200 mm
Weight	250 kg
Personal Computer	Optional

## Purpose

Fast measurement times, high reliability and low operating costs for everyday analysis and total quality control with the most advanced technological optical and electronic components for the metals producing and processing industry. High optical resolution to control tramp and trace elements. Comprehensive metals database included, for fast and easy grade identification.



# S5 Solaris Plus S7 Metal Lab Plus S9 Atlantis



## Highlights and applications

- Wide range of analysed Elements and Applications
- Outstanding analytical performance using CMOS detector
- Reduced measurement time
- New EOS® SW with different results formats
- Compact size and limited weight
- Best price - to - performance ratio

## GNR Service

GNR Global Support Network offers an excellent technical service to ensure the full instrument operation.

- **Training**  
Understand your analyser and its features
- **Online Remote Help Desk**  
Troubleshooting at your fingertips
- **Certification and maintenance**  
Keep your spectrometer in line with international regulations
- **Spare parts and consumables**  
Extensive stock availability of spare parts, consumables and accessories
- **Warranty plans**  
Protect your investment subscribing extended maintenance plan
- **Maintenance**  
Effective and fast recovery operations conditions

## More information

To find out more about GNR range of optical emission spectrometers, visit:

<http://www.gnr.it/products/optical-emission-spectrometry/>



GNR France - 4 rue des Grandes Pièces -  
25770 Serre les Sapins - France  
Tel. +33 381 590 909 - Fax +33 381 590 174  
contact@gnrfrance.com - www.gnrfrance.com

follow us 

