

TECHNICAL DATA MINILAB 150

Optical Air System: Multi High Resolution CCD system with up to 4 CCD solid state detectors depending on required applications. Each CCD has 3.648 active elements (pixels equivalent).
Argon purged optical chamber with Proprietary Low Consumption Argon Device. Stabilized against fluctuations in temperature.

Spectral Field: 178 to 460 nm - High Luminosity Holographic grating with 3600 grooves per mm

Focal Length: 150 mm for all optical systems

Source: Full automatic controlled source. Solid state spark source semiconductor controlled.

Dimension and Weight: H 310 mm ; D 590 mm ; W 500 mm / Kg 35

TECHNICAL DATA MINILAB 300

Optical Air System: Multi High Resolution CCD system with up to 7 +1 CCD solid state detectors depending on required applications. Each CCD has 3.648 active elements (pixels equivalent).
Argon purged optical chamber with Proprietary Low Consumption Argon Device. Stabilized against fluctuations in temperature.

Spectral Field: 165 to 460 nm - High Luminosity Holographic grating with 3600 grooves per mm. 400 - 700 nm extended range with additional CCD

Focal Length: 300 mm for all optical systems

Source: Full automatic controlled source. Solid state spark source semiconductor controlled.

Dimension and Weight: H 410 mm ; D 810 mm ; W 510 mm / Kg 50

TECHNICAL DATA MINILAB

Software:

MLab software, operating in Windows environment is very easy to be used.

The operator can really use all spectrometer's functions.

Some of the most important functions are listed: Analysis-Automatic standardization – Printing and management of certificates – Determination of alloys in accordance to international norms (UNI, ASTM, DIN...) Network linking and remote control.

Other Information:

Personal Computer (optional): Intel Core Processor 4 Gb Ram, 320 Gb HD 7.200 rpm Combo DVD + DVD RW, Monitor 19" LCD, mouse, keyboard and HP Deskjet printer

Power Supply: 110/220 V AC 16 A 1 KW



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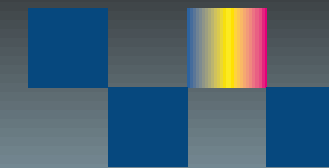
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Local Agent

In relation to the process of continuous development, GNR reserves the right to change the specification of the instrument without previous notice at any time.



ANALYTICAL INSTRUMENTS GROUP

30 years of best-in-class technology



Ultracompact Optical Emission Spectrometer



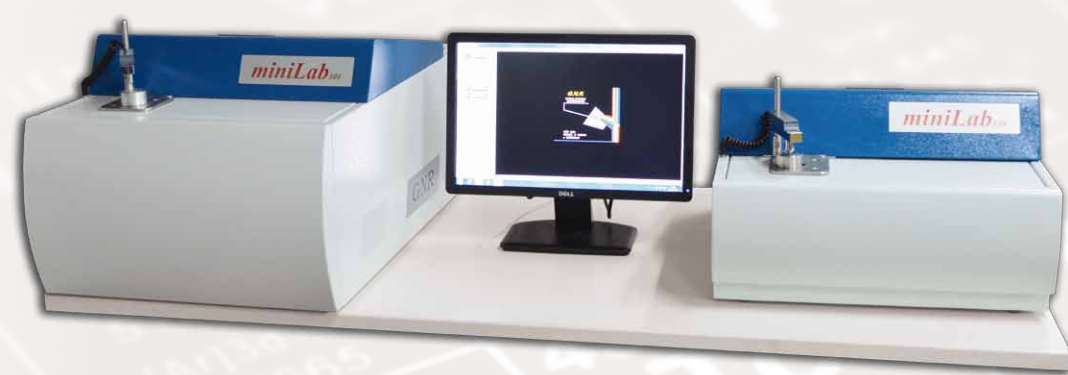
MiniLab is the newest Spark Emission Spectrometer designed by GNR to celebrate its 30th year of operation.

It is available in a couple of configurations, with two different focal length available (**150 mm or 300 mm**) according to customer's technical requirements and budget availability.

Nowadays **MiniLab** instruments are ones of the smallest and lightest compact optical emission spectrometer available on the market with outstanding analytical results in this category.

Its metal matrix foresees copper, iron and aluminum and its adoption could be suggested in small foundries, metal recycling, metal processing industries, quality control of incoming materials, inspection companies and in general for small / medium size business requiring a compact instrument running with low operational costs.

MiniLab Spark Emission Spectrometer series combines easiness of use, low maintenance cost, affordable price with the most advanced technological optical and electronic components.



MiniLab 150

MiniLab 150 is a Multi Matrix spectrometer for Ferrous Alloys, Aluminum Alloys and Copper Alloys (Al and Cu upon request).

Thanks to its innovative optical design, **MiniLab 150** is the only spectrometer of its class to mount up to 4 high resolution CCD with 3.648 active elements to ensure the best spectral resolution (**< 15 pm**).

MiniLab 150 will cover an analytical range **from 178 to 460 nm**.

The innovative argon purged optic, with an argon consumption of 10 l/day only, ensures the maximum light transparency even in the UV region at a negligible cost.



MiniLab 300

MiniLab 300 is a Multi Matrix spectrometer for Ferrous Alloys, Aluminum Alloys and Copper Alloys.

Thanks to its innovative optical design, **MiniLab 300** is the only spectrometer of its class to mount up to 7 + 1 high resolution CCD with 3.648 active elements to ensure the best spectral resolution (**< 10 pm**).

MiniLab 300 with its extended analytical range **from 165 up to 700 nm** can cover almost all the analytical requirements of a modern foundry, but not only.

The innovative argon purged optic, with an argon consumption of 10 l/day only, ensures the maximum light transparency even in the UV region at a negligible cost.

The 3 side open stand, a concept firstly introduced into the market by GNR more than 10 years ago, allows to test specimen with different shapes and size and specimens with irregular geometries.



Smart Calibration Software (SCS)

MiniLab spectrometers are equipped with Smart Calibration Software (SCS) able to standardize the machine with just one single sample for several bases.

The SCS innovation technique allows MiniLab to reduce dramatically, not only the timing of the accuracy settings, but also to minimize the cost of the samples replacing the adoption of several samples for the different bases with one single sample.

