



ANALYTICAL INSTRUMENTS GROUP

# MiniLab



S1 MINILAB

[www.gnr.it](http://www.gnr.it)

# S1 MiniLab

## ULTRACOMPACT OPTICAL EMISSION SPECTROMETER

**S1 MiniLab** is the newest Spark Emission Spectrometer designed by GNR to celebrate its 30th year of operation. Nowadays MiniLab instruments are ones of the smallest and lightest compact optical emission spectrometers available on the market with outstanding analytical results in this category.

S1 MiniLab Spark Emission Spectrometer combines easiness of use, low maintenance cost, very competitive price with the most advanced technological optical and electronic components.

**S1 MiniLab** is a Multi Matrix spectrometer for Ferrous Alloys, Aluminium alloys and Copper alloys. Thanks to its innovative optical design, S1 MiniLab is the only spectrometer of its class to mount up to 4 high resolution CCD with 3.648 elements to ensure the best spectral resolution (< 15 pm).

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

### Technical Data S1 MiniLab

#### Optical System

Multi High Resolution CCD system with up to 4 CCD solid state detectors depending on required applications.

Spectral Field: 170 to 460 nm - High Luminosity Holographic grating with 3600 grooves per mm.

Focal length 150 mm for all optical systems.

Argon purged optical chamber with Proprietary Low Consumption Argon Device.

Stabilized against fluctuations in temperature.

Special material for drift free.

#### Source

Full automatic controlled source.

Solid state spark source semiconductor controlled.

#### Software

MetalLab32 software, operating in Windows environment is very easy to be used. The operator can really use all spectrometer's function. 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

**Dimension and Weight** 50x59x31h cm / 35 Kg.

#### Single Sample Standardization

MiniLab spectrometers are equipped with software able to standardize the machine with just one single sample for several bases.

This innovation technique allow 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.

Local Agent



**G.N.R. S.r.l.**

Via Torino, 7

28010 Agrate Conturbia (NO) - Italy

Tel. +39 0322 882911

Fax +39 0322 882930

E-mail: gnrcomm@gnr.it - gnrtech@gnr.it

[www.gnr.it](http://www.gnr.it)