

# PORTABLE ZEEMAN MERCURY ANALYZER



RA-915+ analyzer;  
RP-91 and RP-91C  
attachments



## METHOD

Atomic absorption spectrometry

## PRINCIPLE OF OPERATION

Is based on the absorption of the 254-nm resonance radiation by mercury atoms using Zeeman correction for background absorption.

## FEATURES AND BENEFITS

- Direct detection of mercury without its preliminary accumulation on a gold sorbent
- Ultralow mercury detection limit in air ( $2 \text{ ng/m}^3$ ) in real-time operation mode
- Wide dynamic measuring range (more than three orders of magnitude)
- Mercury determination in complex samples without sample preparation
- Operation in the field from a built-in battery for performance of atmospheric air and industrial gases measurements
- Control by a keypad or by a computer
- State-of-the art software



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## APPLICATION SAMPLES

Samples	Detection limit	Sample volume or weight	Atomization technique	Number of analyses per hour
Ambient air	2 ng/m <sup>3</sup>	20 l/min	without atomization	*]
Water	0.5 ng/l	20 ml	cold vapor	15
Natural and other gases	100 – 500 ng/m <sup>3</sup>	5 – 20 l/min	without atomization	*]
Soil and sediments	1 µg/kg	200 mg	pyrolysis	15
Urine	5 ng/l	1 ml	cold vapor	15
Hair	20 µg/kg	10 mg	pyrolysis	15
Blood	0.5 µg/l	0.2 ml	cold vapor	15
Plants	2 µg/kg	50 mg	pyrolysis	15
Fish	2–10 µg/kg	5–50 mg	pyrolysis	15

\*] Real-time assaying with a response time of 1 sec.

## EQUIPMENT AND OPTIONS

RA-915<sup>+</sup> portable Zeeman mercury analyser with RP-915P software

Data logger

RP-91 attachment (for liquid samples)

RP-91C attachment (for solid samples)

For software installation a PC is necessary. Minimal system requirements: Windows®-95/98, Pentium 120 MHz, 20 Mb RAM, free ISA slot or the presence of EPP IEEE 1284 parallel port.

## WARRANTY

RA-915<sup>+</sup> analyzer and attachments are covered by 12-months warranty.

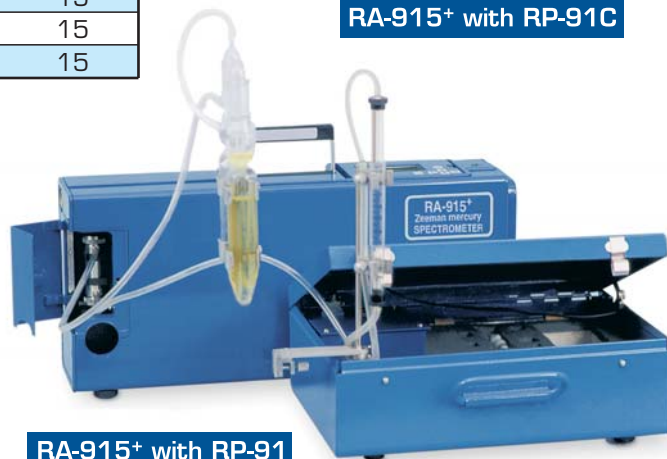
## SPECIFICATIONS

	Size	Weight	Power supply	Power consumption	Rate of analyses per hour	Continuous operation time
RA-915 <sup>+</sup> (air)	460x210x110 mm	7.5 kg	~220/110 V, 50/60 Hz dc 10/14 V	15 W	*	
RP-91 attachment ("cold vapor" technique)	340x240x120 mm	4 kg	~220/110 V, 50/60 Hz dc 6 V	15 W	12 – 15	8 hours
RP-91C attachment (pyrolysis technique)	340x240x120 mm	5.5 kg	~220/110 V, 50/60 Hz	250 W	6 – 8	8 hours

\* Real-time analysis with a response time of 1 s



RA-915<sup>+</sup> with RP-91C



RA-915<sup>+</sup> with RP-91

## SERVICES

Upon request installation and commissioning of RA-915<sup>+</sup> analyzer can be carried out on Customer's site by our service engineers. Consultations and initial training of attendance personnel with due account of Customer's specific needs are performed. Spare parts are delivered and repair is made immediately upon Customer' request (free within the warranty period).

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