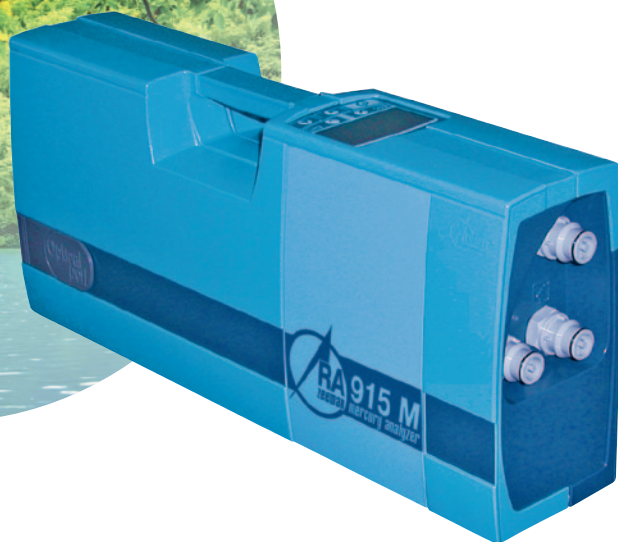# RA-915M

Portable Zeeman Mercury Analyzer

PYRO-915+, RP-92, RP-91NG ATTACHMENTS

METHOD OF MEASUREMENTS AND PRINCIPLE OF OPERATION

Atomic absorption spectrometry at 254 nm with Zeeman correction for background absorption for interference-free measurement.

ADVANTAGES

- Simple to operate.
- Rugged/Versatile design for laboratory and field.
- Ultra-low detection limit and highest selectivity.
- Real-time operation mode for air and gases.
- Direct determination of mercury in liquid and solid matrices within 60 seconds (attachments required). No sample preparation, no use of hazardous chemicals or bottled gases.
- Built-in performance verification test cell and auto zero function.
- Wide dynamic measuring range (four orders of magnitude).
- Controlled by a keypad or a computer via USB interface.
- Data logger for 122 hours of data acquisition, averaging, and storage.
- Rechargeable battery for up to 12 hours operation.

APPLICATION EXAMPLES

Matrix	Detection limit	Sampling	Attachments
Ambient air	0.5 ng/m³	10 l/min	–
Natural and other gases	2–500 ng/m³	1–10 l/min	RP-91NG
Water	0.5 ng/l	1–20 ml	RP-92 (Cold vapor)
Urine	1 ng/l	1–5 ml	RP-92 (Cold vapor)
Solid samples (soils, rocks, sediments)	0.5 µg/kg	10–400 mg	PYRO-915+
Water and solutions	1 µg /l	10–200 µl	PYRO-915
Coal	1 µg/kg	10–300 mg	PYRO-915+
Sorbent traps for stack gases*	0.5 ng		PYRO-915+
Biological samples (tissues, liver, blood, hair, etc.)	1–5 µg/kg	10–300 mg	PYRO-915+
Oil and oil products	1–5 µg/kg	10–200 mg	PYRO-915+
Foodstuff, plants	0.5–3 µg/kg	10–400 mg	PYRO-915+

* range 0.5 – 50,000 ng

RA-915M

RA-915M with PYRO-915+

RA-915M with RP-92

RA-915M with RP-91NG

SPECIFICATIONS

	Dimensions (LxWxH)	Weight	Power supply	Power consumption	Analysis time
RA-915M Air and gas analysis	470x110x210 mm	7 kg	90–240 VAC, 50/60 Hz 12 VDC	40 W	Direct on-line
RP-92 attachment	360x225x125 mm	7 kg	100–240 VAC, 50/60 Hz	20 W	40–80 sec.
PYRO-915+ attachment	430x340x135 mm (pyrolyzer) 400x280x135 mm (power supply unit)	17.5 kg	100–240 VAC, 50/60 Hz	700 W	60–180 sec.
RP-91NG attachment	320x290x160 mm	6.5 kg	100–240 VAC, 50/60 Hz	35 W	

DELIVERY SET

RA-915M portable Zeeman mercury analyzer comes with the RAPID software, charger, shoulder bag, intake hose/filter, mercury filter, cables, manuals.

OPTIONAL

Analyzer can be used in combination with solid, liquid and gas matrix analysis attachments:

- PYRO-915+ attachment for liquid and solid samples analysis (Thermal decomposition method without sample pre-treatment).

- RP-92 attachment for liquid sample analysis (Cold vapor method).

- RP-91NG attachment for natural gas analysis.

WARRANTY

RA-915M analyzer and attachments are covered by 12-months limited warranty.
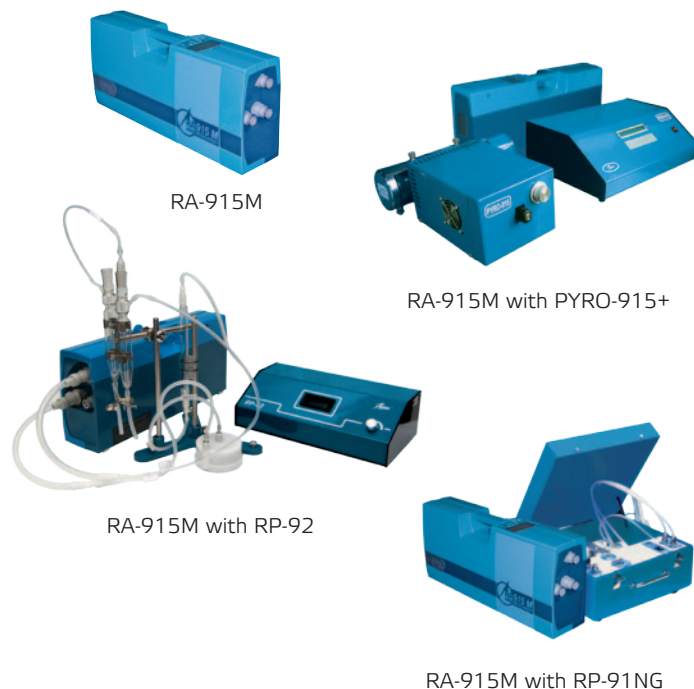
SERVICES

Upon request, installation and commissioning of RA-915M analyzer and attachments can be carried out at Customer's site by our service engineers.

Support and training of operators, meeting Customer's specific needs, are provided by highly qualified application engineers.

LUMEX INSTRUMENTS