

RA-915M

Universal zeeman mercury analyzer



RA-915M is a supersensitive and highly selective portable analyzer that allows real-time mercury measurement in ambient and indoor air. Being combined with dedicated attachments, the analyzer is used for mercury determination in a wide range of objects, such as solid and liquid samples, biological materials, and various gases. RA-915M-based sets can be used in stationary and field laboratories.

PRINCIPLE OF OPERATION

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

APPLICATIONS

RA-915M is used for background air monitoring, mercury surveys including continuous measurements from vehicles, indoor and outdoor pollution detection and mapping, demercurization control, occupational health and safety, etc. Direct air mercury measurement complies with EN 15852 standard.

FEATURES AND ADVANTAGES

- Direct continuous measurement; no traps, no compressed gases
- Ultra-low detection limit and highest selectivity
- Real-time operation mode for air and gases with 1 sec response time
- Attachments for direct mercury determination in liquids, solids, and hydrocarbon gases
- Wide dynamic measuring range (six orders of magnitude)
- Auto zero drift correction
- Self-diagnostic with a built-in test cell
- 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/m ³	10 l/min	Direct
Natural hydrocarbon and other gases	0.5–500 ng/m ³	1–10 l/min	RP-91NG
Technological gases	1–500 ng/m ³	1–10 l/min	Direct
Water	0.5 ng/l	1–20 ml	RP-92 (Cold vapor)
Urine	1 ng/l	1–5 ml	RP-92 (Cold vapor)
Sorbent traps for stack gases*	0.5 ng		PYRO-915+
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+
Biological samples (tissues, hair, blood, etc.)	1–5 µg/kg	10–300 mg	PYRO-915+
Oil and oil products	0.1–5 µg/kg	10–200 mg	PYRO-915+
Foodstuff, plants	0.5–3 µg/kg	10–400 mg	PYRO-915+

* range 0.5 – 50,0000 ng

DELIVERY SET

RA-915M mercury analyzer comes with the RAPID software, shoulder bag, charger, air intake hose, tools and spares set.

SPECIFICATIONS

	Dimensions (L×W×H)	Weight	Power supply	Power consumption	Analysis time
RA-915M Air and gas analysis	470×110×210 mm	7 kg	90–240 VAC, 50/60 Hz 12 VDC	40 W	Direct on-line
RP-91NG attachment	320×290×160 mm	6.5 kg	100–240 VAC, 50/60 Hz	35 W	Direct on-line
RP-92 attachment	360×225×125 mm	7 kg	100–240 VAC, 50/60 Hz	20 W	40–80 s
PYRO-915+ attachment	430×340×135 mm (pyrolyzer) 400×280×135 mm (power supply unit)	17.5 kg	100–240 VAC, 50/60 Hz	700 W	60–180 s

WARRANTY

RA-915M analyzer and attachments are covered by a full 1-year warranty.

SERVICE

Installation and commissioning of Lumex Instruments' mercury analyzers can be carried out at a customer site by our service engineers or by certified distributor.



Find your local Lumex Instruments distributor:
www.lumexinstruments.com | sales@lumexinstruments.com