

J505 Mercury Vapor Analyzer



STATE OF THE ART ATOMIC FLUORESCENCE

Durable, lightweight and easy to use—the Jerome® J505 packs the advanced mercury detection capabilities of sophisticated benchtop analyzers into a compact, portable and powerful device. It can detect mercury at levels as low as $0.05 \mu\text{g}/\text{m}^3$, which meets and exceeds EPA and ATSDR standards for industrial and residential remediation. Because the J505 uses atomic fluorescence, there is no need for a regeneration step with its associated downtime. And the efficient optical cell delivers highly repeatable readings even at very low concentrations.

JEROME®

BROOKFIELD
AMETEK

J505 Mercury Vapor Analyzer



Mercury vapor analysis for a wide range of applications

FEATURES

ATOMIC FLUORESCENCE SPECTROSCOPY: The advanced technology of the Jerome® J505 eliminates nearly all interferences, ensuring you get accurate and repeatable results whether you're in the field or in the lab.

PORTABLE: The J505 packs the advanced capabilities of a sophisticated benchtop analyzer into a compact, portable and powerful device. The detection cell is also smaller, lighter and more durable than atomic absorption units.

LOWER FLOW RATE: The highly efficient optical cell requires less flow to purge the system, allowing the J505 to run at a lower flow rate and minimizing sample dilution as found in other spectroscopy instruments.

REGULATORY COMPLIANCE: The J505 can detect mercury at levels as low as $0.05 \mu\text{g}/\text{m}^3$, which meets and exceeds EPA and ATSDR standards for industrial and residential remediation actions as well as OSHA, NIOSH, ACGIH and MSHA action levels.

ZERO REGENERATIONS: Because the J505 uses atomic fluorescence spectroscopy to detect mercury, no regenerations or regeneration-related downtime are needed.

SEARCH MODE: While in search mode, users are able to continuously draw in samples of air in order to locate the source of mercury contamination, allowing targeted corrective action to be taken quickly.

DURABLE: The J505 is housed in a light, ergonomically designed, durable metal casing that sets a new precedent for hand-held, low-level mercury analyzers.

DATA LOGGING: The integrated data logging system can store data for up to 10,000 test results including date, time and up to 100 test sites.

INTUITIVE INTERFACE: The J505 features a color display with an intuitive menu system that makes operation easier than ever before and comes with a USB interface for easy data transfer.

APPLICATIONS

Ambient Air Analysis
HAZMAT / Emergency Response

Industrial Hygiene & Worker Safety
Gold Mining

Regulatory Compliance: Detection & Cleanup
Scrubber Efficiency Monitoring
Mercury Exclusion Testing
Light Bulbs & Mercury Switches
Equipment Monitoring

SPECIFICATIONS

Detection Range	$0.05 \mu\text{g}/\text{m}^3$ to $500 \mu\text{g}/\text{m}^3$
Resolution	Standard Mode: $0.01 \mu\text{g}/\text{m}^3$ ($10 \text{ ng}/\text{m}^3$) Quick Mode: $0.1 \mu\text{g}/\text{m}^3$ ($100 \text{ ng}/\text{m}^3$) Search Mode: $0.1 \mu\text{g}/\text{m}^3$ ($100 \text{ ng}/\text{m}^3$)
Accuracy	$\pm 15\%$ at $0.3 \mu\text{g}/\text{m}^3$ $\pm 10\%$ at $1 \mu\text{g}/\text{m}^3$ $\pm 10\%$ at $25 \mu\text{g}/\text{m}^3$ $\pm 10\%$ at $100 \mu\text{g}/\text{m}^3$
Response Time	Standard Mode: 28 seconds Quick Mode: 16 seconds Search Mode: 8 seconds, then updates in 1 second intervals
Flow Rate	1 L/min
Result Units	ng/m^3 , $\mu\text{g}/\text{m}^3$, mg/m^3
Autosample Intervals	1, 2, 5, 10, 15, 20, 30, 45, 60, 90 or 120 minutes
Integrated Data Storage	10,000 test results; retains date, time and up to 100 locations
Display	3.5" (9 cm) color LCD
Battery	Rechargeable NiMH 10+ hour life, charges in 3 hours
Power Requirements	12 VDC for the instrument; 100–240 VAC, 1A, 50–60 Hz for the AC power supply
Fuse	Auto-resetting fuse
Operating Environment	5°C to 45°C , non-condensing, non-explosive
Output	USB A
Dimensions	12" L x 6.2" W x 8.4" H (30.5 cm L x 15.7 cm W x 21.3 cm H)
Weight	6.5 lbs. (3.0 kg)
Warranty	1 year, factory parts and labor
Certifications	UL 61010, CE

