

Atomic Absorption Spectrometer

Simple, Effective, Efficient

The 230ATS Atomic Absorption Spectrometer comes with three powered lamp brackets inside of the instrument and can be upgraded to include D2 background correction.



Features

10" Color touchscreen

Automated wavelength setting

Automated Slit selection

Push button ignition

5 screen tabbed GUI (graphic user interface)

4 USB ports

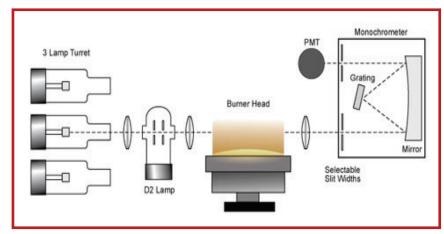
High Energy Optical Design

Optional D2 Background correction

Robust Steel & Aluminum Build

Unparalleled Reliability





Our in-line D2 background correction uses less mirrors for higher energy & superior sensitivity



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See More with Superior Optics

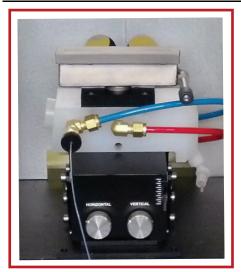
Our innovative optical design unlocks the full potential of atomic absorption, providing greater sensitivity and lower detection limits than traditional systems. By maximizing energy throughput, our instruments can measure lower concentrations of key elements like Arsenic and Selenium without expensive EDL lamps.

This efficient design also allows our spectrometers to be remarkably compact. Our instruments have a smaller footprint and lighter weight compared to competitor models, making them ideal for space-constrained labs and field applications.

The bottom line? Our optimized optics deliver enhanced performance and versatility. Get expanded analytical capabilities without the high cost and bulk of dated AA systems. Discover new levels of trace element detection with our cutting-edge atomic absorption technology.



Unlock Maximum Sensitivity with Superior Nebulization



Our short-path dynamic nebulizer-burner setup is engineered for performance. We precisely position an inert nebulizer needle to inject the sample into a venturi for incredible nebulization. This nebulizes even challenging sample types with high total dissolved solids or viscosities.

The sample then reaches a high-velocity impact bead made of corrosion-resistant material. This generates a fine aerosol mist for the most efficient transport of sample to the flame.

What does this mean for your lab? Our innovative nebulizer setup delivers extreme sensitivity and stability across all sample matrices. You get lower detection limits to see more of your sample and expanded analytical capabilities.

Experience the difference optimized nebulization makes. Achieve new levels of sensitivity and productivity with our cutting-edge sample introduction system. Unlock the full potential of your lab.



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Superior Nebulization

Easy serviceability was a guiding principle in our 230ATS design. We've engineered quick-slide doors and panels to make wear components readily serviceable. Our founder's decades of hands-on experience ensured critical parts are accessable and easy to replace.

Because at Buck Scientific, we know downtime costs you.

While other brands maximize profits using inferior components, we refuse to compromise. Our atomic absorption systems are made to perform, day after day, with industrial-grade materials.

Experience the difference thoughtful design makes. Our instruments deliver the powerful performance labs need while simplifying upkeep. You get robust construction coupled with incredible ease of service.

Partner with the only spectrometer designed by technicians, for technicians. Discover worry-free ownership and increased productivity. That's the Buck Scientific difference.



The Buck Promise

At Buck Scientific, you're not just a customer - you're family. Since 1970, our close-knit team has prioritized personal support at every step.

Questions? We're always here to help via phone, email, or video chat. Our experts offer guidance remotely or in-person training at your lab. Wherever you are, you're covered.

Maintenance needs? Buck offers service contracts for all of our instruments domestically and internationally. Domestic clients utilize our cost-effective, ship-back service. We can take care of repairs and maintenance at our U.S. headquarters, getting instruments back to peak performance quickly and cost effectively.

Training course at Buck Headquarters are available for:

- -Atomic Absorption spectroscopy (1/2 day)
- -Microwave Digestion (1/2 Day)
- -UV/Vis spectroscopy (1/2 day)



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Specifications

Model	235ATS AA Spectrophotometer
Electrical requirements	Auto selectable 100V to 230V 50/60Hz input
Power Consumption:	.5 A
Optics:	
Detector:	model 928; wide range general purpose, 190-930nm
Lenses:	Supracil - amorphous silica
Monochromator:	0.25m Ebert mount
Grating:	32nm x 27nm; 600 grooves/mm
Wavelength adjustment:	3 digit motor driven, 0 to 1000nm +0.1 nm
Reproducibility:	+0.1 nm
Resolution:	variable slit - 2Å, 7Å, and 20Å
Operating Modes:	
Absorbance/Emission:	-0.0820 to 3.2000
Concentration:	to 5 significant digits
Integration Period:	0.1 to 99.9 seconds
Screen Refresh:	0.224, 0.448 or 0.896 seconds
Analog (Recorder) Output:	1V/ABS (-0.08 to 3.2V)
Background Correction:	In-line Deuterium Arc
Hollow Cathode Lamps:	
Dimension:	1.5" OD Striking Voltage: 500V
Lamp Current:	0 to 18 mA average current (typical current is 1.5-8.0 mA)
Duty Cycle:	25%
Modulation Frequency:	(142 Hz Nominal)
Burner Assembly:	
Design:	Polyethylene Pre-mix chamber, glass impact bead dispersion
Burner Heads:	Titanium; air-acetylene head - 4" x 0.026" single slot
	nitrous oxide head - 2" x 0.019" single slot
Adjustments:	Manual Horizontal and Vertical positioning
Performance:	
Average Noise:	0.0018 ABS (Cu at 324.7nm, 7Å slit, 5 sec. int.)
Reproducibility:	<+5% relative standard deviation

