



GBC Scientific Equipment

Pre-Owned 932AB Plus
Atomic Absorption Spectrophotometer,
includes Windows 7™ computer system,
instrument software,
and all shipping charges
(US & Canada only).

\$8,000.00

Features Include:

- **Automatic wavelength and slit setting for maximum convenience and error-free set-up**
The large, self-calibrating 0.33 meter monochromator has been specifically designed to provide the high light throughput and stability needed for atomic absorption. Spectral bandwidth is continuously adjustable between 0.2 and 2 nm, and for furnace work, reduced slit height is available with all slit widths. A wide-range photomultiplier tube covers the full wavelength range.
- **True Double Beam Stability**
The genuine double beam optical system of the GBC 932AB Plus measures the sample and reference signals every mains cycle to give the best correction for lamp noise and the most stable baseline possible.
- **Protected Optical System Ensures Long-Term Performance**
The 932AB Plus uses mirrors throughout the optical system to ensure that correct focus and high energy throughput are maintained at all wavelengths. To protect the optical surfaces, a dust cover is fitted over the optical system and additional protection is provided by coating the mirrors with quartz.
- **Asymmetric Modulation Reduces Noise**
Asymmetric modulation for double beam instruments is a GBC innovation. This technique has been optimized for the best possible double beam performance. The GBC 932AB Plus reduces noise by up to 40%.
- **Flame Atomization System**
All materials in contact with the sample have been selected for maximum corrosion resistance. The spray chamber is made from inert polypropylene. The burner is made entirely of titanium. The nebulizer has a platinum-iridium capillary and a titanium venturi. The nebulizer also has an adjustable sample uptake rate, essential for optimum performance with refractory elements or organic solvents. The whole flame atomization system is easily removed for cleaning or for changeover to graphite furnace.

GBC Scientific Equipment (USA) LLC
151A N. State Street, P.O. Box 339
Hampshire, IL 60140
Toll-Free: 800-445-1902 Fax: 847-683-9871
Email: sales@gbcscientific.com
www.gbcscientific.com



Additional Features Include:

- **Ultra-Pulse Background Correction**

Most background correctors measure the background absorbance 50 or 60 times per second and the delay between the measurement of background and total absorbance can be as much as 10 milliseconds. The GBC Ultra-Pulse system takes 200 (50 Hz) or 240 (60 Hz) sample measurements per second and the delay between the measurement of background and total absorbance is about 1 millisecond. This produces a dramatic reduction in background correction errors.

This system also allows correction for higher background levels than most systems - up to 2.5 total absorbance. In addition, the design of the high intensity D2 lamp and associated power supplies ensures unequalled lamp lifetime. The GBC lamp will operate for 1000 hours even at full current.



- **Automatic Flame Control**

The 932AB Plus utilizes automatic flame control for added safety and convenience. This system is interlocked to gas supplies, burner type, flame detector, mains power and liquid trap. It provides a programmed ignition and shutdown sequence - if nitrous oxide-acetylene is selected, an air-acetylene flame is first established and then the acetylene flow is automatically boosted before automatic changeover to the nitrous oxide-acetylene flame.

- **Utilizes Standard Hollow Cathode Lamps or the Patented Application Source Lamp**

- **Application Source Lamp**

The heart of the 932/933 Plus is the patented Application Source Lamp, which brings unprecedented levels of simplicity, performance and cost savings to atomic absorption spectrometry. The Application Source or "mini turret" consists of six individual cathodes aligned in a circle within the one unit. The type of cathodes are user selectable and can be customized for various application such as environmental, food, petroleum and clinical.

The Application Source Lamp simplifies lamp handling, operation and alignment. Due to the unique design, there is no need to change lamps when changing elements, which provides additional cost savings.

- **Guarantee of Performance**

GBC guarantees both sensitivity and precision, with a guaranteed performance greater than 0.75 absorbance for 5 mg/L copper with an RSD less than 0.45% for ten 10-second integrations. This performance is achieved by an efficient blend of good design and durable materials.

Includes 90-day warranty

Please Note: Many other options are available for use with this GBC system, including:

- Installation & Training
- Standard Hollow Cathode Lamps
- Application Source Lamps
- Nitrous-Oxide/Acetylene Burner
- Atom Trap (improves flame sensitivity)
- Flame Autosampler
- Graphite Furnace System with Autosampler
- Hydride Generator
- Mercury Concentrator

