



www.letLtd.com Proudly serving laboratories worldwide since 1979

CALL +847.913.0777 for Refurbished & Certified Lab Equipment

Perkin Elmer AAnalyst 300 AA Spectrometer

The AAnalyst 300 is a computer controlled atomic absorption system providing automatic sequential multielement analysis capabilities.

Specifications

- **OPTICAL SYSTEM**

- **Photometer:** Double-beam, time-shared and space-shared optical system. Front-surfaced, reflecting optics with protective coating. Optical system sealed within “tongue and groove” protective cover. Deuterium background corrector.
- **Monochromator:** Littrow design
 - **Wavelength Range:** 185-860 nm; motorized drive for automatic wavelength selection and parking
 - **Diffraction Grating:** 1800 lines/nm blazed at 236 nm and 597 nm
 - **Grafting Area:** 64X72 mm
 - **Reciprocal Linear Dispersion:** 1.6 nm/mm
 - **Focal Length:** 274 mm
 - **Spectral Bandwidth:** 0.2, 0.7 and 2.0 nm; motorized slit drive for automatic slit selection. Automatically selectable slit height settings (High or Low)
- **Detector:** Wide range photomultiplier with UV-transmitting window
- **Light Sources:** Hollow cathode lamps and electrode less discharge lamps. Lamp elements and recommended operating currents are automatically recognized and set when using Perkin Elmer Lumina series AA lamps. Lamp alignment completely automatic with motorized 6 position lamp turret.

- **GAS CONTROLS & BURNER SYSTEM**

- **Flame Gas Controls:** Computer controlled oxidant selection with automatic gas sequencing and oxidant and fuel monitoring and control. Keyboard-actuated remote ignition system with air-acetylene. Acetylene flow is automatically incrementally adjusted prior to the oxidant change when switching to or from nitrous oxide-Acetylene operation.
- **Flame Safety Functions:** Interlocks prevent ignition if the proper burner head (air-acetylene or nitrous oxide-acetylene), the nebulizer/end cap, or burner drain system is not correctly installed; the level of the liquid in the drain vessel is incorrect; or gas pressures are too low. Interlocks also will automatically shut down burner gases if a flame is not detected, if the temperature of the flame shield is too high, or if any or if any of the

interlock functions is activated. Provision is included for safe shutdown from all operating modes in the event of a power failure. Purging of the gas box is controlled through the instrument or controller keyboard.

- **Burner System:** Premix burner design with high strength inert mixing chamber, angled to ensure proper drainage. Separate fuel and oxidant lines to the burner chamber limit combustible gas mixtures to those areas specifically designed to accommodate them. Separate auxiliary oxidant inlet allows variation of fuel: oxidant flow ratios without varying nebulizer oxidant flow, thereby maintaining constant, optimum solution aspiration rates. Includes adjustable Universal GemTip corrosion resistant nebulizer and an all titanium, 10cm, single-slot burner head for air-acetylene operation. Optional: High Sensitivity GemTip nebulizer and other burner heads (10 cm 3 slot air acetylene; 5 cm single slot air acetylene; 5 cm nitrous oxide acetylene available). Burner mount provides horizontal, vertical, and rotational adjustments. Quick disconnect flame module simplifies changeover to optional HGA furnace operation where the furnace and optional autosampler are mounted on a sampling arm that can be easily rotated into the area.
- **Sample Area:** 29 cm wide X 25 cm deep sample compartment accommodates a wide variety of sampling accessories. Opens to the front for easy access via a removable flame shield. Two detachable corrosion resistant sample trays (each 48 cm wide X 20 cm deep)
- **CONTROL & DATA SYSTEM**
 - **User Interface:** Complete PC control using AA Winlab software operating under the Microsoft Windows operating environment. Provides complete control of the instrument and it's major accessories plus data handling and storage.
 - **Data Handling:** Instrument readings linear in absorbance (-0.500 A to + 3.000 A) concentration or emission intensity with continuously variable scale expansion from 0.01 to 100 times. Integration times operator-selectable from 0.1 to 60 sec in increments of 0.1 seconds. Reading modes include time averaged integration, non averaged integration (peak area) and peak height measurement. Includes built in statistics.
- **DIMENSIONS**
 - **99 cm X 46 cm X 68 cm (without PC controller)**
 - **68 KG (without PC controller)**



www.IetLtd.com Proudly serving laboratories worldwide since 1979

CALL +847.913.0777 for Refurbished & Certified Lab Equipment