



SPECTROBLUE[™] FMX26
ICP-OES



Where price and performance
meet perfection

SPECTROBLUE

The compact, midrange ICP-OES solution that brings a new level of performance to routine laboratory analysis.

The SPECTROBLUE capitalizes on more than 25 years of benchmark service by SPECTRO inductively coupled plasma optical emission spectrometers. That heritage can be found in its Paschen-Runge optical system that provides unmatched optical resolution and sensitivity. SPECTROBLUE also utilizes revolutionary UV-PLUS gas purification technology and a breakthrough OPI-AIR interface that avoids costly, complicated external water cooling.

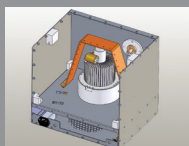
SPECTROBLUE is available in three rugged, ultra-reliable versions engineered for everyday use in industrial or environmental applications.

Combined with perhaps the most robust generator in the industry, the result is analytical perfection.



The SPECTROBLUE's generator provides powerful, stable, time-tested performance. Its robust design starts with a 4.5kV solid-state power supply and a 27MHz free-running oscillator — both commonly found only in top-of-the-line models.

The heat generated by its high-power ceramic tube is handled via an innovative air-cooled approach so there's no need for the usual complicated, expensive external water-based cooling system. That is one reason why we say SPECTROBLUE is the first benchtop ICP-OES with no extras needed under the bench. Developed for high-end, high-demand applications, SPECTROBLUE's field-proven system provides most laboratories with all the uptime, throughput, stability, and reliability they require.

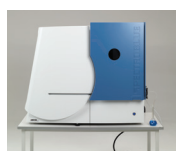
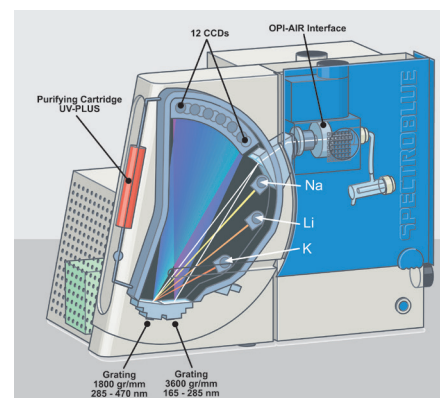


The SPECTROBLUE generator is designed for maximum efficiency. It packs ample power reserve even for extreme plasma loads. Plus its free-running 27MHz design provides wider frequency bandwidth. So whatever the load, power is effectively and stably fed into the plasma.



The SPECTROBLUE optical system delivers the most direct path to cost-effective results.

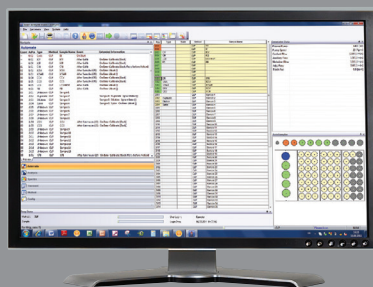
SPECTRO has refined and perfected its benchmark optical platform with SPECTROBLUE's advanced confocal optical system, featuring optimized Paschen-Runge assembly (ORCA) and aluminum half-shell technology. It combines compact dimensions; simple, robust construction; minimized volume; and a direct high-transmission path for maximized light throughput. The system delivers a resolution of 8 picometers (pm) in the important range of 165 to 285 nm, and 16 pm for higher wavelengths. In this way line-rich spectra can be more easily processed. A twin-interface version, SPECTROBLUE TI, enables automatic axial and radial plasma observation and is available for environmental applications. Overall results: improved measurement accuracy and fewer expensive re-tests.



In addition to exceptional performance, SPECTROBLUE comes equipped with SPECTRO's UV-PLUS gas purification system. The hermetically sealed optical chamber circulates its argon atmosphere via a small membrane pump through a specialized cleaning device, ensuring excellent long-term stability and availability. Best of all, no expensive gas is consumed.



SPECTRO SMART ANALYZER software supplies a simple yet comprehensive user interface with intuitive controls. This simplified, flexible system provides familiar MS Outlook look and feel, one-click operation of routine functions, and customizable views. Operators without extensive training can take advantage of SPECTROBLUE's unique analytical capabilities, using the smart user interface. In simplest mode, an intuitive app provides a quick overview of the instrument and current process. Manual, prompted manual, and automatic modes are available according to user preference and proficiency. Dialogs are restricted to a single level for perfect clarity and swift decision-making.



Software functions are divided into categories, linked via a central navigation panel. Within each category, only relevant buttons and selections are displayed. Each screen is clearly designed and usually self-explanatory. A single click switches between categories, making control of this sophisticated ICP-OES spectrometer simple.

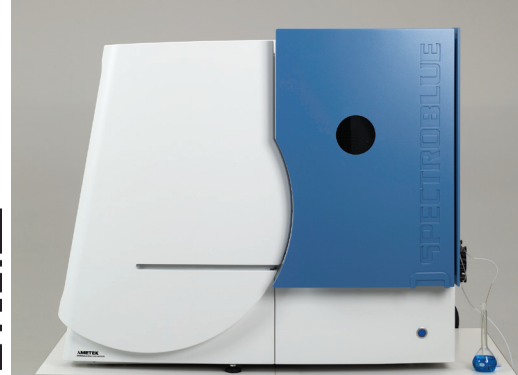


SPECTRO helps ensure uninterrupted performance and maximum ROI over a spectrometer's life with proactive performance maintenance, performance upgrades, applications solutions, consultation, training, and ongoing support. For Example: AMECARE performance upgrades allow field modification of newer SPECTROBLUE EOP models (Model No. FMX26) to SPECTROBLUE TI functionality.

- ▶ Perfect sensitivity and resolution
- ▶ Perfect stability, durability, and reliability
- ▶ Perfect simplicity and ease of use
- ▶ Perfect cost of ownership
- ▶ Perfect fit for your lab

SPECTROBLUE

Three versions to suit both industrial and environmental uses



SPECTROBLUE is available with three different versions of its plasma interface, depending on intended use.

SPECTROBLUE EOP: axial interface

SPECTROBLUE EOP's axial plasma viewing provides high sensitivity and low detection limits ideal for superior analysis of trace elements in industrial and environmental applications.

A SPECTRO service engineer can easily perform an AMECARE performance upgrade in the field that converts a SPECTROBLUE EOP model to TI functionality.

SPECTROBLUE SOP: radial interface

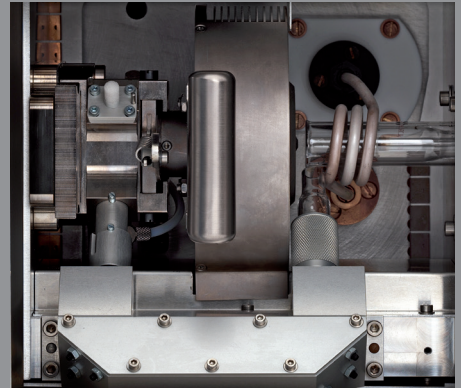
Equipped for standalone radial plasma viewing, the SPECTROBLUE SOP is ideal when low detection limits are of less importance than accuracy and precision at higher sample concentrations. This model offers superior precision and excellent tolerance for high saline and organic fractions. It's also well-suited for analyzing suspensions and slurries.

SPECTROBLUE TI: twin interface

The SPECTROBLUE TI provides accurate determination of alkali/earth alkali elements in a complex alkali/earth alkali matrix. This makes it ideal for environmental applications such as analyzing sodium, potassium, or calcium in wastewater or soil matrices.

SPECTROBLUE TI automatically performs both axial and radial viewing of the plasma during the same measurement. Radial viewing minimizes the easily ionizable element (EIE) effect that otherwise reduces linearity in axial-only viewing. Radial viewing not only increases linearity but also further improves the instrument's already good dynamic range. Complementing these advantages, SPECTROBLUE TI's radial plasma viewing mode eliminates all need for an ionization buffer, thus cutting costs and reducing contamination risks, while enabling high-sensitivity measurement of toxic elements using the axial viewing mode.

Unlike conventional dual-view designs, SPECTROBLUE TI's simple, compact twin-interface optics maximize



light throughput by minimizing optical surfaces. Its switchable 3-mirror periscope, instead of resting directly under the torch, is offset at a 45° angle. Along with a unique plasma-side protective window, this design greatly reduces contamination — and eliminates the need for frequent maintenance. In fact, all SPECTROBLUE models are intelligently engineered to minimize adjustment or maintenance of any kind.

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