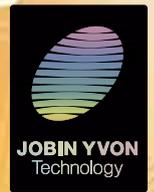
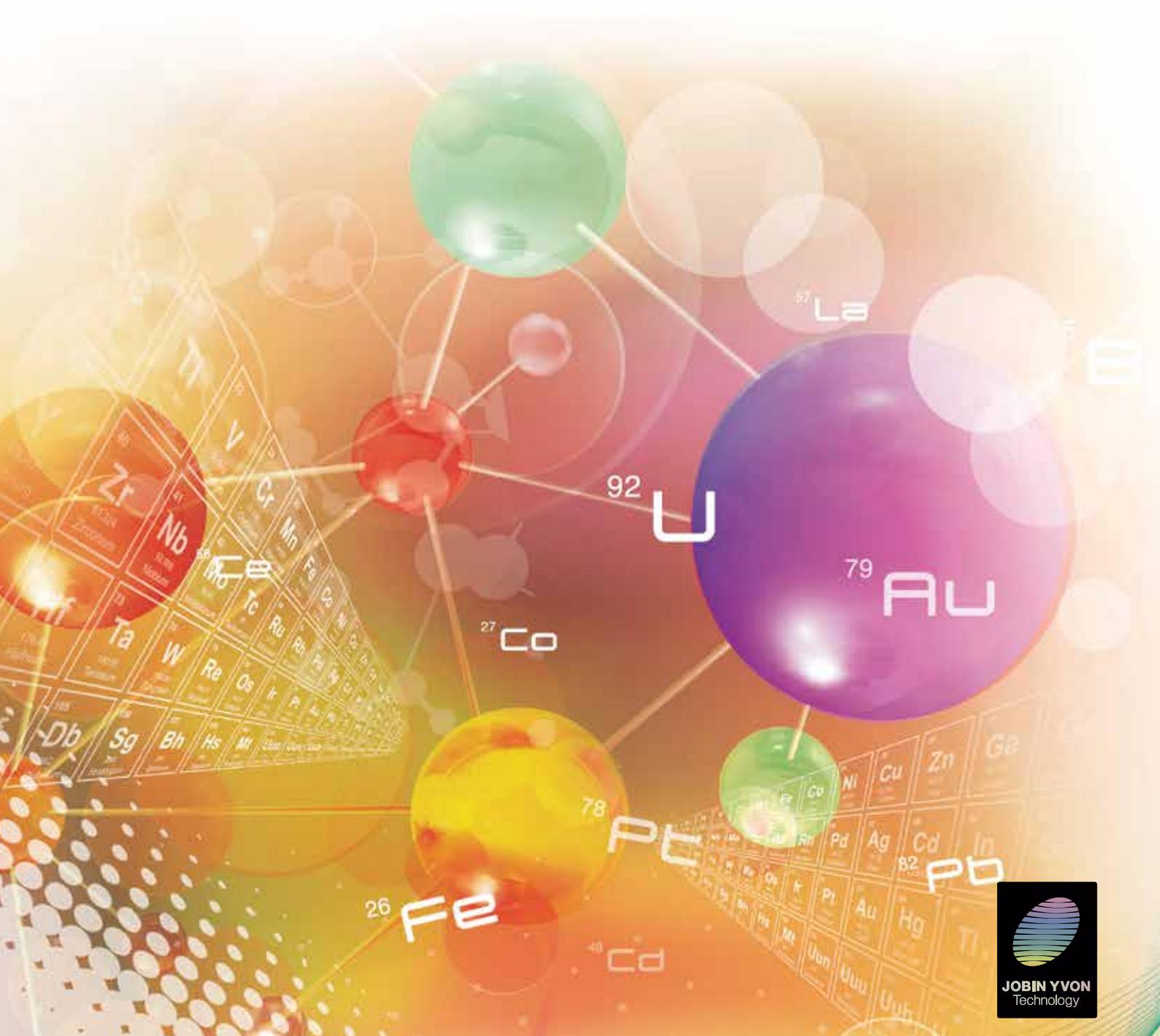


# Ultima Expert LT

High performance at affordable price



## Designed for Challenging Applications

**HORIBA Scientific** develops and manufactures high performance ICP-OES spectrometers for more than 35 years.

The new Ultima Expert LT provides high performance at affordable price for laboratories with challenging samples

Ultima Expert LT integrates high efficiency Jobin Yvon optical design capable to achieve optimal performance for a large variety of sample types and matrices.

Ultima Expert LT is driven by the powerful Analyst software featuring a large variety of analytical functionalities for tailored control and analysis.

The robustness of the Ultima Expert LT makes it ideal for applications common to mining, chemicals manufacture, salt production, wear metals in oil analysis, petrochemical and metallurgical production

Gain in performance with the Ultima Expert LT for your most challenging applications!

# Ultima Expert LT

Superior Performance in ICP-OES

## Unique Plasma Torch Design for Most Versatile and Accurate Analyses

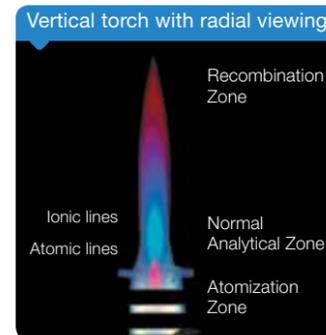
Ultima Expert LT uses a unique plasma torch design with radial viewing mode to allow viewing of the entire normal analytical zone.

The vertical torch, the original sheath gas device and the wide injector enable the Ultima Expert LT to handle difficult matrices, with robust operation and minimal maintenance.

Ultima Expert LT ensures the lowest detection limits even with the most challenging samples, such as high salt content, brines, dissolved solids and complex organics.

Its water-cooled high efficiency 40.68 MHz solid state generator enhances the ability to handle a large range of samples, reduces warm-up time down to 15 minutes, and improves stability and reliability.

All these features make the Ultima Expert LT the most versatile, accurate and robust ICP OES spectrometer available.



## High Resolution and Full Wavelength Coverage

Ultima Expert LT delivers the highest resolution with less than 5 picometers for the UV range and less than 10 picometers for the Visible range. Such resolution can be achieved due to the unique optical design of the Ultima Expert LT, which integrates a high density holographic grating and one meter focal length optics.

Full wavelength coverage from 160 to 800 nm is offered to satisfy all the requirements for elemental analysis. Optional Far UV kit is available to extend coverage down to 120 nm for halogen elements analysis.

High resolution and excellent sensitivity allow elements with high, low and trace concentrations to be measured accurately, giving you maximum confidence in your results.

## Easy to Handle, Easy to Maintain

Spacious compartments for sample and plasma are designed to facilitate sample handling.

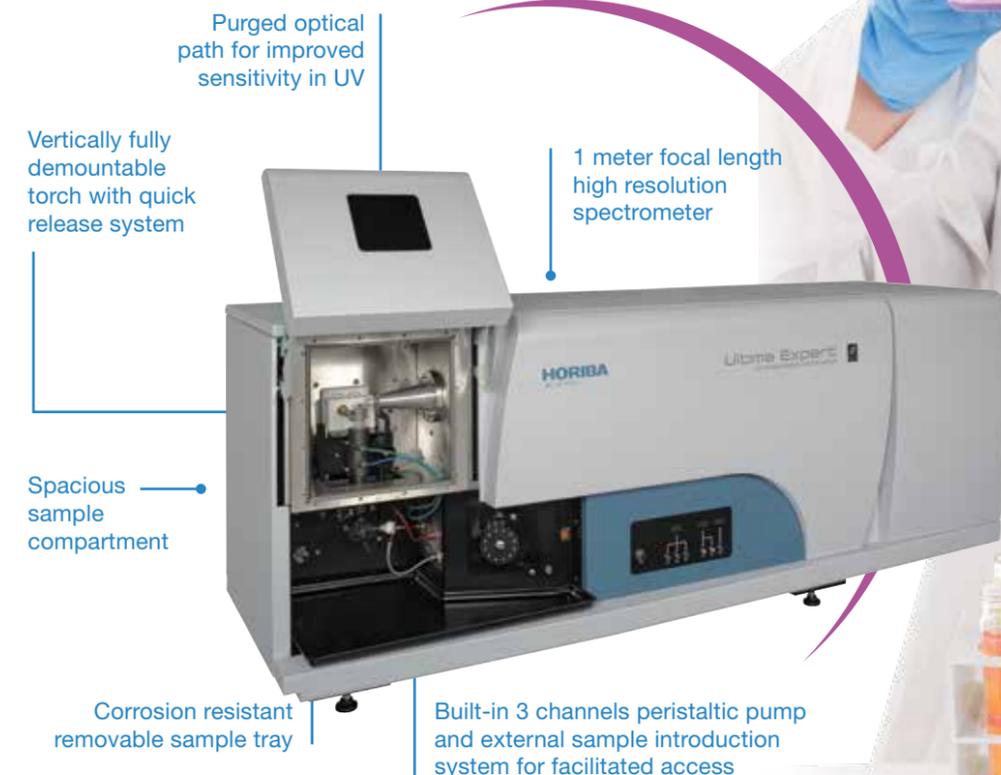
Quick release, fully demountable torch with no adjustment required facilitates multi-user operation and provides excellent reproducibility.

## Powerful Software with advanced features

The Analyst software of the Ultima Expert LT extends instrument capability beyond analytical performance with advanced feature for the user.

Complemented with S<sup>3</sup>-base viewer for the display of the information contained in the S<sup>3</sup>-base database for facilitated identification of potential spectral interferences, and an uncertainty calculation tool for calibration quality improvement, the Analyst software provides full instrument control and advanced features for method development, analysis and results management.

Thanks to all the functions available in Analyst software, Ultima Expert LT delivers results you can trust!



# Ultima Expert LT

## Specifications



### Standard Configuration

Generator	Radio-frequency, solid-state 40.68 MHz, water-cooled
Spectral range	160 – 800 nm
Spectrometer	Thermally stabilized, 1 meter focal length with 2400 g/mm grating used in the 1st and 2nd order <5 pm for 160-320 nm and <10 pm for 320-800 nm.
Resolution	Fully demountable torch with 3 mm i.d. alumina injector and quartz tubes
Plasma torch	Concentric glass nebulizer and glass cyclonic spray chamber, 3 channel peristaltic pump
Sample introduction	

### Options

Instrument	Far UV kit to extend measurement capability down to 120 nm for halogen elements analysis
Accessories	Autosampler AS-500 with optional rinse station Argon humidifier Introduction system kits for improved performance (small volume, organics, Hydrofluoric acid, high total dissolved solids) Concomitant Metals Analyzer for simultaneous measurement of hydride forming elements and other elements Oxygen kit for alkali elements in organics

### Facility requirements

Dimension (wxdxh)	1696 x 698 x 604 mm
Weight	205 kg (452 lb)
Power supply	Single phase, 220-240 V, 50-60 Hz, 4 kVA
Environmental	20 to 80 % humidity, 18-24°C at ± 2°C
Argon	99.995 % purity
Nitrogen	160 to 190 nm, 99.999 % purity 120 to 160 nm, 99.9995 % purity
Exhaust	250 m <sup>3</sup> /h (150 cfm)

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