

# Ultrospec<sup>®</sup> 7500

Focus...on quality control



# Spectrophotometry Essential to your lab—essential to your work



## Is your equipment up to spec?

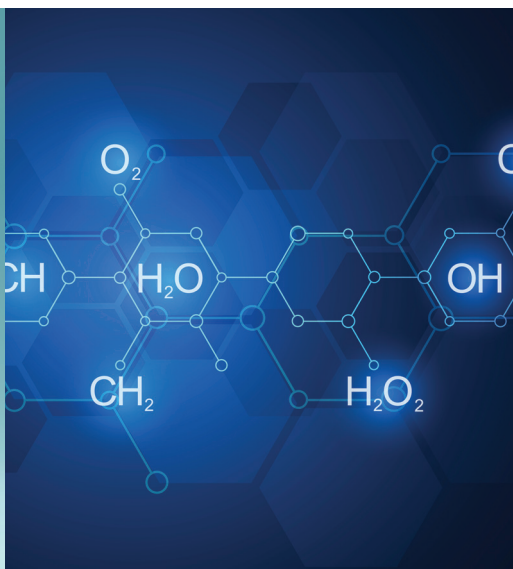
As a scientist involved in high throughput of routine samples, often with different requirements, state-of-the-art spectrophotometry equipment is vital to the success of your work. Whether you are a researcher or a quality control technician working in a pharmaceutical, academic research or industrial manufacturing lab, you depend on accurate, consistent results across multiple samples—every day. This becomes even more critical if you additionally face regulatory burdens, such as GLP, 21 CFR part 11 compliance or IQ/OQ.

In fact, when it comes to quality control in your lab, it can be a daunting challenge to keep up with rapidly changing technologies and regulations. How confident are you that your spectrophotometry equipment is state-of-the-art and compliant, so that you can continuously optimize your quality analysis work?

## Count on best-in-class instruments...

Biochrom, an affiliate of Harvard Bioscience, has been delivering best-in-class UV-Vis spectrophotometers for over 40 years to a dedicated global base of thousands of scientists just like you.

Cited tens of thousands of times in research publications since its launch in 1982, our Ultrospec range has been installed in all types of labs across the globe. The newest member of this range, the Ultrospec 7500 UV-Visible spectrophotometer builds on this legacy to give you the highest level of confidence in your spectrophotometric analysis and quality control work for years to come.



### Ultrospec 7500

- **Powerful**—Onboard firmware includes a wide selection of pre-loaded methods
- **Efficient**—Easily transfer results and method information via the USB port using the simple screen capture function
- **Intuitive**—Easy-to-use, icon-driven color touch screen for on-board control and analysis

## ...backed by superior support services

Your instruments must receive regular verification and meet stringent regulatory requirements, critical for laboratory auditing and quality control.

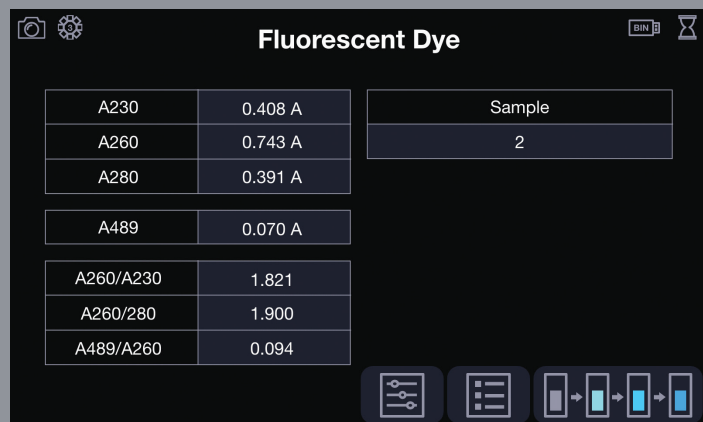
From initial installation qualification (IQ) to operational qualification (OQ) and ongoing performance qualification (PQ), you can count on Biochrom's expert team to deliver the necessary validation testing required to keep your lab compliant—and running smoothly.

Biochrom deploys the National Institute of Standards and Technology (NIST) traceable standards to demonstrate evidence of quality control according to ISO/IEC 17025.

# Ultrospec 7500—Powerful Simplicity



The Ultrospec 7500 is a simple-to-use instrument—with highly advanced performance functionality, and a sophisticated GLP mode to ensure high quality, consistent and reliable results. Versatile and precise, this instrument is ideal for use in any high-end, manufacturing or production laboratory.



### 1 Powerful, Onboard Firmware

The onboard firmware provides a wide selection of pre-loaded methods for life sciences, including applications for quantification of nucleic acids, proteins and cell density. Measurements may be taken via direct absorbance, or by accessing the pre-loaded menu of commonly available fluorescent dyes for high precision requirements.

### 2 Versatile Sampling Options

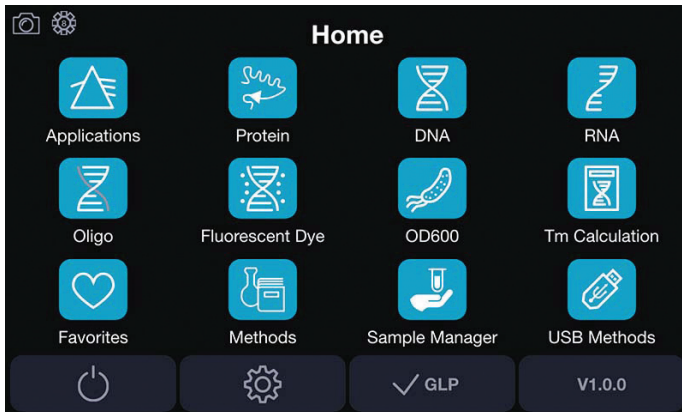
The Ultrospec 7500 comes with an automated 8-cell sample carousel. It also has a wide range of optional accessories, such as a sippers, heating and various cell accessories, for the ultimate in flexibility.



### 3 Modern, Energy-Efficient Display

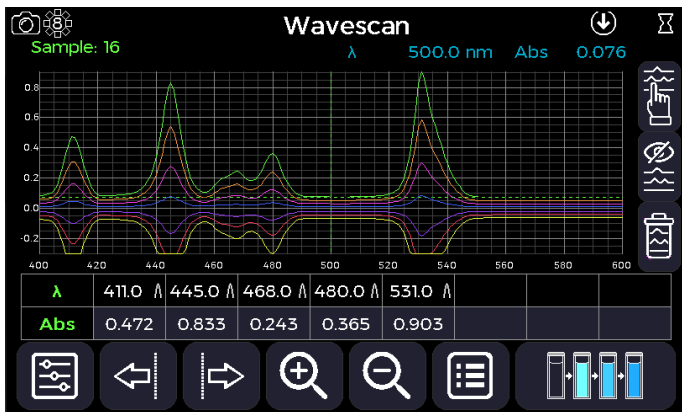
The system has an 800×480-pixel resolution backlit LCD color display with touch panel navigation of the instrument's built-in firmware. When the display is off, the only power consumed is by the touch screen controller. Instrument exits sleep mode with a touch of the screen.

# Intuitive Control and Powerful Analysis



## Instrument Homescreen

With quick access to common applications from the homescreen, users are always just a few clicks away from the next set of sample readings.



## Powerful Onboard Analysis

Color-coded sample overlays allow for quick visual analysis of multiple sample reads, along with zoom and track functionality for more in depth peak analysis.

## Ultrospec 7500 IQ/OQ/PQ Services:

- Installation Qualification (IQ)—ensures quality-controlled system installation (location, environment, complete system set-up)
- Operational Qualification (OQ) —validates that system functionality meets manufacturer specifications
- Performance Qualification (PQ)—provides protocols for ongoing validation of your instrument
- Documentation—flexible test templates validate certified calibration standards, robust, automated data log stores performance history
- For on-site IQ/OQ/PQ services specific to your country, please contact your local Biochrom representative

# Specifications and Ordering Information

TECHNICAL SPECIFICATIONS	
<b>Wavelength Range</b>	190 to 1100 nm
<b>Monochromator</b>	1200 lines/mm Aberration corrected concave grating
<b>Wavelength Calibration</b>	Automatic upon switch on
<b>Beam Height</b>	15 mm
<b>Spectral Bandwidth</b>	<2 nm
<b>Wavelength Accuracy</b>	±1 nm
<b>Wavelength Reproducibility</b>	±0.5 nm
<b>Light Sources</b>	Xenon flash lamp
<b>Detector</b>	Two silicon photodiodes
<b>Photometric Range</b>	-3.000 to 3.000 A, 0.1 to 100%T
<b>Photometric Accuracy</b>	±0.5 % or ±0.003 A whichever is greater at 546 nm
<b>Photometric Reproducibility</b>	±0.5 % to 3.000 A at 546 nm
<b>Stray Light</b>	<0.05 %T at 220 nm using NaI or at 340 nm using NaNO <sub>2</sub> , <0.10 %T at 380 using NaNO <sub>2</sub> ±0.01 A/h at 340 nm
<b>Stability</b>	±0.001 A/h at 340 nm for 0 A
<b>Noise</b>	±0.002 peak to peak ± 0.0005 RMS at 340 nm for 0 A
<b>Digital Output</b>	USB Flash Drive, PC via PVC software, Optional Bluetooth
<b>Data Export</b>	USB Flash Drive: .tsv, native PVC format
<b>Method Storage</b>	156 with PIN number protection
<b>Graphical Display</b>	Yes, zoom and track function
<b>Sample ID</b>	Yes
<b>Languages</b>	English, German, French, Spanish, Italian, Japanese, Chinese
<b>Dimensions</b>	510 × 350 × 160 mm
<b>Weight</b>	13.00 kg
<b>Power Input</b>	19 VDC at max 90 VA from a supplied 100 to 240 V~, 50/60 Hz Mains Power Adapter

ORDERING INFORMATION	
<b>80-2140-60</b>	Ultrospec 7500
<b>80-2140-62</b>	Printer accessory Ultrospec 7500
<b>80-7100-33</b>	Resolution CFR Software
<b>80-2119-89</b>	IQ/OQ Documentation for Ultrospec 7500
<b>80-2119-90</b>	PQ Documentation for Ultrospec 7500



[www.harvardbioscience.com](http://www.harvardbioscience.com)

**Americas**

(+1) 800-272-2775

[www.biochrom.co.uk](http://www.biochrom.co.uk)

**United Kingdom, Europe**

(+44) (0) 1223 423723

[sales@harvardbioscience.com](mailto:sales@harvardbioscience.com)

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