

Technical Specification

Parameter	7410	7415
Wavelength range	320 to 1000nm	198 to 1000nm
Wavelength Accuracy	±2.0nm	
Wavelength Reproducibility	±0.5nm	
Spectral bandwidth	5.0nm	
Absorbance Range	-0.3A to 2.5A	
Absorbance Accuracy	+/- 0.01A at 1.0A	
Transmittance Range	0 to 199.9%	
Quantitation Range	Blank with up to 20 standards	
Spectrum Range	320 to 1000nm	198 to 1000nm
Internal Memory	10GB	
External Memory	Limited by attached mass storage device	
Optics	Single beam with tungsten lamp	Single beam with Xenon lamp
Detector	Silicon photodiode	
Outputs	USB Type A x 2, USB Type B x 1, Ethernet connection (RJ45)	
Supply Voltage/Frequency	100 - 240VAC at 50 to 60Hz	
Power Supply	24V DC, 2.5A	
Dimensions (w x d x h)	280 x 500 x 156mm	
Weight	9kg	
Warranty	3 years (including xenon lamp)	

Ordering Information

Part Code	Description
741001	7410 visible scanning spectrophotometer, fitted with 10x10mm cuvette holder, and supplied with a universal power supply and an instruction manual
741501	7415 UV/visible scanning spectrophotometer, fitted with 10x10mm cuvette holder, and supplied with a universal power supply and an instruction manual

Accessory Ordering Information

Part Code	Description
SMP50/PRINTER	External Printer fitted with a battery and supplied with UK, EU and US power leads
630204	10 x 10mm single cuvette holder
630005	10 to 100mm adjustable path length cuvette holder
630304	Micro-cuvette holder with reduced aperture
637071	Test tube holder (accepts 10mm square cuvettes, 16 and 24mm diameter test tubes)
740401	Automatic 8-cell changer



74 Series Spectrophotometers

The 74 series spectrophotometers are ideal for applications in education and routine quality control. All units feature a colour touchscreen and intuitive user interface, allowing manual free operation.



Introducing the 74 Series

The 74 series spectrophotometers provide accurate and reliable results in various applications from teaching, to industrial applications, to routine sample analysis in quality control environments. These spectrophotometers have been designed to be easy to use and have enhanced connectivity for simple and quick data transfer.

There are two models in the 74 series range. Model 7410 uses a tungsten halogen lamp for measurements in the visible spectrum from 320 to 1000nm. Model 7415 uses a press to read xenon lamp to extend measurements into the UV spectrum, down to 198nm. Both models have a 5nm spectral bandwidth and are covered by a 3-year warranty.

Measurement Modes

The 74 series spectrophotometers offer measurement modes for simple photometrics; concentration calculated using a single standard or a factor; quantitation with the ability to create a calibration curve using up to 20 standards; full spectrum scanning; multi-wavelength, where up to 4 wavelengths can be measured simultaneously and kinetics, to monitor the change in absorbance over time.

Key Features

- 7" High Definition colour touchscreen display
- Multiple USB ports for data storage & printer connectivity
- Android operating system
- Internal memory for methods and results (10GB onboard storage)
- Multi-language options including English, French, German, Spanish and Italian
- Extensive range of accessories available
- 3-year warranty (including xenon lamp)

Instrument Design

The clever ergonomic design of the 74 series focuses on ease of accessibility, whilst keeping the overall footprint as small as possible. The power switch and USB ports are located at the front of the instrument for easy access. The large colour touchscreen is situated in front of the large sample chamber to ensure unhindered access to both.

Inside the 74 series spectrophotometers are powerful optics coupled with a traditional grating & monochromator design to produce accurate & reliable results.

Enhanced Connectivity

The 74 series have been designed with excellent connectivity in mind. The easy access USB ports on the front of the instrument can be used for software updates, data storage and printer connectivity. Results & methods can be stored as CSV files for easy transfer to Microsoft Excel®. With the optional CPLive connectivity results can be automatically uploaded and stored effortlessly & securely in the cloud.



Display

These spectrophotometers have a large 7" High Definition colour touchscreen display which makes navigation fast and intuitive. The display allows full spectrum scans, quantitation curves and kinetics runs to be viewed effortlessly.

The touchscreen capability enables users to zoom in and out and select points all by simply touching the screen. The touchscreen display is fast and responsive even when wearing gloves.

Interface Design

The 74 series spectrophotometers have a custom designed user interface which is based on an Android platform, making it easy to navigate and control the instrument. The home screen gives quick access to the different measurement modes as well as shortcuts to previously saved methods and results.

Sample Chamber

The large sample chamber accommodates all available accessories, therefore saving valuable laboratory bench space. The large sample chamber lid allows easy access for loading and unloading samples and for changing accessories. The domed lid has been designed to allow tall multi-cell changers or test tubes to be used whilst still keeping a light tight sample chamber.

Accessories

The 74 series spectrophotometers are versatile and flexible instruments with an extensive range of accessories available which have been specifically designed to be easily interchangeable. The powered accessories includes the automatic 8-cell changer.

The non-powered accessories include a 10x10mm cuvette holder (fitted as standard), test tube holder, adjustable path length (10 to 100mm) cuvette holder & a micro-cuvette holder. All of these accessories are easy to interchange using the ergonomic thumb screw.

For instant results there is also a printer available which connects to the spectrophotometer via the USB port at the front of the instrument. Spectrum scans and kinetics runs are printed in a vertical orientation to maximise the amount of information displayed.

Internal Memory

These spectrophotometers have a generous 10GB on-board storage which allows methods and results to be stored on the instrument.

