### **SPECIFICATIONS**

MODE	2100	2100-UV
Spectral Slitwidth	5 nm	
Optical System	Single Beam, Grating System 1200 lines/mm	
Wavelength Range	325-1000 nm (Vis)	200-1000 nm (UV/Vis)
Wavelength Accuracy	± 2 nm	
Repeatability	± 1 nm	
Readability	1 nm	
Stability	± 0.002 A / hr @ 500 nm	
Stray Light	£ 0.3% T @ 340 and 400 nm	£ 0.3% T @ 220 and 340 nm
Photometric Range	0-125% T, -0.1-2.5 A, 0-1999 Conc. (0-1999 Fac.)	
Accuracy	± 0.004 A @ 0.5 A	
Standard Cell Holder	4 - position	
Light Source	Tungsten Halogen Lamp	Tungsten Halogen/Deuterium Lamp
Data Output	Two-line, 9-LED, displays Trans., Abs., Conc., and Wavelength	
	RS-232C, Analog Output	
Dimensions	470 mm (18.5") W x 400 mm (15.7") D x 140 mm (5.5") H	
Weight	10 kg	12 kg
Power Requirement	115/230 volt. ± 10%, 60/50 Hz Adjustable	

### **SOFTWARE**

2100-401 Unico Application Software for PC's. Windows® 95 or 98 required. Program includes Standard Curve, Abs. / %T / Conc.,

### **ACCESSORIES**

2100-102 Rectangular Longpath Cell Holder without Base. (Requires Universal Base).

2100-103 Single 10 mm Cuvette Holder without Base. (Requires Universal

2100-104 Cylindrical Cell Holder without Base. (Requires Universal Base).

2100-105 Water-Jacketed Single Cuvette Holder without Base.
(Requires Universal Base, Water Bath & Flow-thru Panel).

**2100-107-A** Peltier Thermal Electric Cell Holder for 10 mm Cuvettes. Includes Holder, Panel, and Adjustable x-y Base. (Requires Temperature Controller, either 2100-107-B or 2100-108).

**2100-107-B** Peltier Thermal Electric Temperature Controller for use with the 2100-107-A.

2100-108 Peristaltic Pump & Flow-thru Controller for Ambient Flow-thru system. (Requires Flow-thru Panel and Tubing).

2100-109 Peristaltic Pump, Peltier Thermal Temperature, & Flow-thru Controller. (Requires Flow-thru Panel and Tubing).

2100-120 Haake Model DC10-B3 Water Bath for temperatures from 32 to 100° Celsius. For use with 2100-105-P & 2100-105.

2100-121 Haake Model DC10-K10 Water Bath for temperatures ranges of -10 to 100° Celsius. For use with 2100-105-P & 2100-105.

### **ACCESSORY PACKAGES**

2100-101-P	Test Tube packages for 8 to 20 mm diameter Test Tubes.
	Includes Universal Base, one Holder, & Top hat for up to 150
	mm tall Test Tubes

2100-102-P Rectangular Longpath Cell package for Cells up to 100 mm Pathlength. Includes Universal Base & one Holder.

2100-103-P Single 10 mm Cuvette package. Includes Universal Base &

100-104-P Cylindrical Cell package for Cells up to 100 mm Pathlength. Includes Universal Base & one Holder.

2100-105-P Water-Jacketed Single Cuvette package for 10 mm Cuvettes for Temperatures from 0 to 95° Celsius. Includes Universal Base & one Holder. Includes Holder, Universal Base, & Flow-thru Panel. (Water Bath Required).

2100-106-P Micro Cell package for use with 10 mm Microcuvettes. Includes Adjustable x-y Base & Holder.

100-107-P Peltier Temperature Control package for 25, 30 & 37° Celsius. Includes 10 mm Cell Holder, Panel, Adjustable x-y Base & Thermal Electric Temperature Controller.

2100-108-P Ambient Flowcell package. Includes Peristaltic Pump, Flowthru Controller, Flow-thru Panel & Tubing (Requires Flowcell).

100-109-P Peltier Flowcell package for 25, 30 & 37° Celsius. Includes Peristaltic Pump, Temperature/Flow-thru Controller, Flow-thru Panel, Tubing & Adjustable x-y Base (Requires Flowcell).

Glassware and NIST Traceable Standards Available



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#### **United Products Instruments, Inc.**

182 Ridge Road Dayton, NJ 08810

## **2100 SERIES**

Visible & UV/Vis Spectrophotometers

## 2100 SERIES 2100 SERIES



The Totally Affordable & Accurate SPECTRO



# Simple Solutions for your Spectrophotometry needs

The new 2100 and 2100-UV Spectrophotometers are simple, flexible, easy-to-use and maximize value while providing performance you would expect from a 5 nm bandpass instrument. The 2100 Series simplicity is reflected in its attractive price without sacrificing accuracy & precision. The value is evident from the performance provided every day, all year. The flat, low-profile design minimizes bench "dead space", allowing room for cuvette racks, notebooks or a laptop computer. To simplify documentation, both units can be controlled from profile design minimizes. Application Software for Windows® 9X from the built-in RS-232C port. The software expands the applications to include Standard Curve and Abs. vs Time measurements. Press save and move data directly into Microsoft Excel®. It will be there, waiting for you to analyze.





### Easy-to-Use, Easy-to-Read Display

The two-line, 9-LED display is large enough to read from any angle and distance, so there's no need to search or "squint". For the 2100-UV, a simple push of the button on the display allows you to turn on/off either lamp, extending the lifetime. Readily switch modes from Absorbance to % Transmittance, or enter a Concentration or Dilution Factor. No complicated menus to slow down technicians from completing other important tasks. The standard large, flexible sample compartment has a smooth 4-cell holder, 4 glass cuvettes are included and a wide variety of accessories available for many applications.

**2100 SERIES** 



## Accessories to fit your needs and budget

TEMPERATURE CONTROL, FLOWCELL, BOTH . . . . . . . OTHER APPLICATION ?

The 2100 Series offers nine different Accessory Packages which are both easy to order and install. Anything from longpath cells to temperature control, our engineers have designed all of our accessories for easy, quick exchange. Cell holders are pre-aligned, or we provide an adjustable x-y platform to suit your needs i.e., microvolumes, etc.

Packages include all necessary tools for instrument operation,

glassware optional.

Longpath & cylindrical cells up to 100mm in length or test tubes up to 150mm height.

The Universal Base allows up to three different types of holders for customization - i.e. Test Tube, Longpath, Cuvette Holder, All-In-One!

Temperature control can be handled be our Peltier Thermal Electric Controller ( $\pm$  0.5° C accuracy) or by the traditional water bath.

The Peltier & Flowcell Controller is available in 3 separate types of packages, allowing you to choose the one that fits your application best.

Peltier Temperature Control or Flowcell only.

- Peltier Temperature Control & Flowcell a
- s a one unit package.



Haake Water Bath Model DC 10-BC3

### **Application Software**

### Ready to GO. .

### Install and start collecting your data.

The optional **Unico** Application Software assist in your data **documentation and provides complete control from a computer.** 

#### Applications include;

- Abs./ %T/ Conc.
- Standard Curve This allows the user to graph up to 8 standards using Least Squares, Linear thru Zero, 2nd Order, Segmented, or Slope/Intercept.
- Abs. vs Time Kinetics

An unlimited number of unknowns can be read and stored. The cable is included with the software.