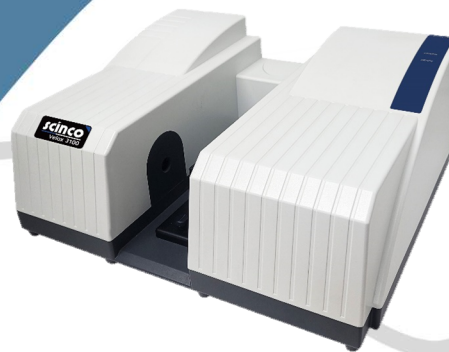


# Velox 3100

## PDA UV-VIS Spectrophotometer



The Velox 3100 is a high-performance photodiode array (PDA) UV-VIS spectrophotometer that combines speed, stability, and ease of use. It is designed to support a wide range of applications, including material analysis, kinetics, pharmaceutical QA/QC, biotechnology, food and beverage testing, and academic research.

### Features

- **Ultra-Fast Full Spectrum Scanning**  
Scan the 190 ~ 1100 nm wavelength range in 1 second with advanced 1024-channel PDA technology.
- **Mechanics-Free Optical System**  
All-in-one modular design with no moving parts ensures long-term stability, easy maintenance, and uninterrupted performance.
- **Open Sample Compartment**  
Open design allows quick sample exchange, accommodates various accessories, and minimizes stray light interference.
- **Versatile Measurement Modes**  
From routine photometric analysis to advanced bio and life science research – including DNA/protein quantitation – powered by intuitive, streamlined software.
- **Flexible Accessory Options**  
A comprehensive range of accessories enables tailored configurations to meet diverse analytical needs.

### Software

#### Basic Mode

- Spectrum display
- Quantification
- Kinetics: Time- and Temperature-Based analysis

#### Bio Mode

- Supports measurements of nucleic acids, protein analysis, cell density, enzyme activity, enzyme mechanisms, and thermal denaturation.

#### Color Analysis

- Measures various color indices.

#### MCA

- Quantifies up to four components in a mixture.

#### Ultra Kinetics Mode

- Real-time full-spectrum data acquisition at 20 ms intervals.

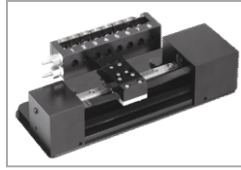
#### Validation

- Performs validation of absorbance, wavelength, stray light, and spectral resolution.

## Accessories



Single Cell Holder



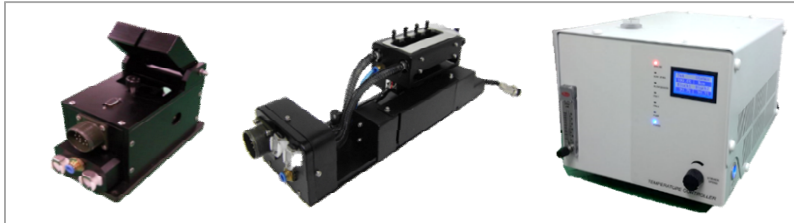
Water Jacketed 8-Position Multi-Cell Holder



Advanced Transmittance Holder



Reflectance Module



Single Peltier Temp Control Unit, Multi Peltier Control Unit



Diffuse Reflectance

## Specifications

Model	Velox 3100
Technology	Photo Diode Array
Light Source	Tungsten / Deuterium
Detector Type	Photo Diode Array, 1024 channels
Wavelength Range	190 - 1100 nm
Spectral Resolution	1 nm
Wavelength Accuracy	± 0.2 nm ( at D2 peak 656.1 nm ) ± 0.5 nm ( Holmium Oxid Solution )
Wavelength Reproducibility	< 0.02 nm
Photometric Range	± 3 A
Photometric Accuracy	± 0.005 A at 0.2, 0.5, 1.0 A (NIST 930e) ± 0.01 A, 60 mg/L Potassium Dichromate
Photometric Reproducibility	<0.001 A (0.2 and 0.5 A) <0.002 A (1.0 A)
Stray Light	< 0.03%T at 340 nm (Sodium Nitrite) < 0.05%T at 220 nm (Sodium Iodide) < 1.00%T at 198 nm (Potassium Chloride)
Baseline Flatness	< 0.0005 A
Photometric Noise	< 0.0001 A at 300 nm
Photometric Stability	< 0.001 A/h at 0 A, 300 nm after 1 hour warm-up
Dimensions (W x D x H)	541 x 450 x 232 mm
Weight	16.5 Kg
Electrical Supply	AC 100 – 240V, 85 W
Environmental Requirements	Temperature: 15 ~ 35 °C Humidity: up to 80% (Non-condensing)



### SCINCO

627 Bongeunsa-ro, Gangnam-gu, Seoul 06083, KOREA Tel: +82-2-2143-8200 Fax: +82-2-2143-8355

Website: [www.scinco.com](http://www.scinco.com)  
E-mail: [scinco@scinco.com](mailto:scinco@scinco.com)

### R&D Center / Daejeon Office

746 Daedeok-daero, Yuseong-gu, Daejeon 34055, KOREA Tel: +82-42-610-7400 Fax: +82-42-610-7500