DRAWELL
Artist of Science

DW-K5210 DW-K5210-C DW-K5210F

Nano Spectrophotometer



Specifications

Technical Parameters	
★Optical path	Ultra-Micro Module:1mm、0.4mm、0.05mm (automatic optical path switching) Cuvette Module: 10mm, 5mm, 2mm, 1mm;
Volume requirements	Ultra-Micro Module: 0.3～2μL Cuvette Module: Volume≥1000μL (for 10mm optical path standard cuvettes) or liquid height ≥8.5mm;
★Detection Wavelength	Ultra-Micro Module: 230/260/280/340nm Cuvette Module: 230/260/280/340/600 nm
Detection Repeatability	Ultra-Micro Module: ≤0.002A (1mm optical path)or ≤1%CV, whichever is larger; Cuvette Module: ≤0.002A (1mm optical path) or ≤1%CV, whichever is larger;
Absorbance Range	Ultra-Micro Module：0～100 Abs
Concentration Measurement Range	Ultra-Micro Module: 2～5000 ng/μL (dsDNA); 0.06～149 mg/mL (BSA);
Detection Time	Ultra-Micro Module: Less than 3 seconds

Ultra-Micro Module：Equipped with automatic measurement and automatic zero-adjustment functions; instant detection is achievable by lowering the detection arm;

Cuvette Module：Equipped with automatic measurement and automatic zero-adjustment functions; instant detection is achievable by lowering the detection arm;

★Cuvette Detection Module Includes：Nucleic Acid Detection Module, Protein Detection Module, OD600 Module.

Functional Parameters	
Ultra-Micro Module	dsDNA, ssDNA, RNA, User-defined, A280
Cuvette Module	dsDNA, ssDNA, RNA, User-defined, A280, OD600
Fluorescence Module	dsDNA, RNA, microRNA, RNA IQ, ssDNA, Protein Quantitation Kits, Ion Sphere, Fluorometer, Standard Curve, Kinetics
Hardware Parameters	
Display	8-inch touch screen, multi-point capacitive touch
Operating System	LINUX
Supported Languages	9 languages including Chinese, English, French, German, Arabic, Spanish, Russian, Japanese, and Korean;
Data Output	Supports USB data export and Ethernet connection
Data Output Ports	2 USB-A ports, 1 Type-C port, 1 HDMI port, and 1 Ethernet port, enabling connection with

	various devices such as mice, keyboards, and desktop computers;
Data Storage	Measurement results are automatically saved in spreadsheet format and can be exported via USB.
Other Parameters	
Instrument Dimensions (L*W*H)	230mm×320mm×190mm
Instrument Weight	4 kg
Operating Conditions	Temperature10～45℃; Humidity: Below 85%
Operating Voltage	24V 2.5A 60W

Fluorescence

Light source	Blue LED、 Red LED
Excitation filters	Blue excitation 430~495nm, Red excitation 590~640nm
Shutter filter	Green emission 510~580nm, Red emission 660~725nm
Detector	Photodiode (320~1100nm)
Sample throughput	1 sample;
Sample volume	1-20 μL
Tube type	0.5ml PCR tube
Tube Loading volume	≥100 μL
Preheating time	No preheating required
Measurement speed	≤3s/tube
Linearity	R^2>0.995
Linear range	≥ 5 orders of magnitude
Built-in Reagent Calculator: Calculates the required amounts of dye and buffer for working solutions;	
Includes Fluorometer Mode: Directly measures the fluorescence intensity of samples;	
Includes Ion Sphere Mode;	
★Includes Fluorescence Standard Curve Module: Allows free selection of excitation and emission light sources, curve types, standard sample volume, and total reagent volume;	
★Includes Fluorescence Kinetics Module: Supports customization of delay time, interval time, and number of detections for up to 5 stages.	

Model	**DW-K5210**	**DW-K5210C**	**DW-K5210F**
Ultra-Micro Module	√	√	√
Cuvette Module	/	√	√
Fluorescence Module	/	/	√
Automatic detection	√	√	√