

DW-K5600NDW-K5600CN DW-K5600F Nano Spectrophotometer

The microvolume Spectrophotometer has become a routine instrument in modern molecular biology laboratories. It is an instrument that conducts quantitative and qualitative analysis of substances using the spectrophotometric method, and is commonly used for nucleic acid and protein quantification, microarray, full-wavelength scanning, and quantitative determination of bacterial concentration, etc. By adding a fluorescence module to the micro spectrophotometer, it is often used for the detection of low-concentration nucleic acids and proteins, greatly expanding the detection range.

Advantage

- 5 path auto ranging,(1、 0.4、 0.1、 0.04、 0.02mm)fit test sample concentration, no need manual setting
- Xenon lamp 10⁹ flashes
- Spetrum range 190-910nm
- LINUX, 8' touch screen
- 3864-element linear silicified CCD array for higher stability
- Absorbance range up to 600Abs, double the detection range
- Detection range: dsDNA up to 30,000 ng/μL
- Rich interfaces: USB/Type-C/HDMI/Ethernet/Bluetooth/WiFi
- New fluorescence detection module for low-concentration samples (DW-K5600F)
- Professional functions: standard curve, kinetics, reagent calculator



Features

- 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;
- Support U-disk、 Ethernet、 Bluetooth、 Wifi;
- 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.

Specifications

★Optical path	Microvolume module:1、 0.2、 0.1、 0.03、 0.02mm(Auto ranging) Cuvette module:10mm、 5mm、 2mm、 1mm
Sample volume	Microvolume module:0.3~2L; Cuvette module:≥1000uL(10mm Optical path); Or the liquid height is ≥ 8.5mm
Optical source	Long life Xenon lamp(10 ⁹ flashes)
Detector	3864-Elemental linear silicification CCD array
Test wavelength range	220~800nm;
Wavelength accuracy	±1nm;
Resolution Spectrum Bandwidth	2nm(FWHM at Hg 254nm);
Absorbance Accuracy	0.002 Abs;
Photometric Accuracy	1%(0.988 Absorbance at 257 nm);
★Abs range	Microvolume module:0~600Abs(=10mm Optical path) Cuvette module:0~12 Abs(at 1mm optical path)
★Test range	Microvolume module:2~30000 ng/μl(dsDNA);0.06~895mg/mL(BSA); Cuvette module:0.2~60ng/μl(dsDNA);0.006~1.79mg/mL(BSA);
Test time	<3s
Test repeatability	0.002A (1mm optical path) or 1% CV
Dimensions of the instrument(L*W*H)mm	230*320*190
Weight	4kg
Operating conditions	Temperature: 10 - 45°C; Humidity: Below 85%
Output	24V 2.5A 60W

Fluorescence

Light source	Blue LED、 Red LED
Ex filter	Blue Ex 430~495nm,Red Ex590~640nm
Em filter	Green Em 510~580nm, Red Em 660~725nm
Detector	Photodiode (320~1100nm)
Sample Channel	1
Sample volume	1-20μL
Tube type	0.5mL pcr tube
Tube need volume	≥100μL
Preheat time	No need
Test speed	3s/tube
Linear	R²≥0.995
Linear range	5 order of magnitude
Built-in reagent calculator, which calculates the amounts of dyes and buffers required for the working solution;	
With the fluorescence measurement mode, the fluorescence intensity of the sample can be directly measured.	
Including the Ion Sphere mode	
Contains a fluorescence standard curve module, allowing for free selection of excitation and emission light sources, selection of curve types, standard sample volume and total reagent volume.	
It features a fluorescence dynamics module, allowing for the customization of the delay time, interval time, and detection frequency for up to 5 stages.	

Model type	DW-K5600N	DW-K5600CN	DW-K5600F
Optical path	Microvolume 0.02、 0.03、 0.1、 0.2、 1mm		
Detector	3864-Elemental linear silicification CCD array		
Display	8'touch screen		
Cuvette	/	√	√
Fluorescence	/	/	√
Auto test	√	√	√
Stir	/	Optl	Optl
Printer	Optl	Optl	Optl