

Micro-spectrophotometer

Micro-spectrophotometer can quickly and accurately detect nucleic acid, protein and cell solution. Because it is easy to use, less sample consumption, no preheating, can quickly cleanup residual samples, no cuvettes or other sample positioning devices required, samples do not need to be diluted and other characteristics. It has become a routine instrument in many laboratories. During the test, users can directly add the sample point to the sample plate. After the test the sample can be directly erased or recovered.

Technical Features

User-friendly software, easy to use:

Graphical software operation, more intuitive interface, the results can be directly exported, easy to save, view and output data.

Micro-volumes measuring:

Only 0.5 μ L-2 μ L sample is needed for each test. After the measurement, the samples can be recovered and the precious samples can be studied with confidence.

Long life light source, do not need to warm up:

Xenon flash, life span is 10⁹ (up to 10 years). No preheating, direct use, ready to test in any time, no need for other consumables.

Convenient and easy to use:

Directly point the sample on to the sample plate without dilution or cuvette. The sample concentration can be measured as 50 times of the conventional uv-visible photometer, and the result can be directly output as the sample concentration.

High concentration detection:

The maximum concentration of the detectable sample is 15000 ng/ μ L (Nano-500, dsDNA as an example), and the sample basically does not need to be diluted.

Fast detection:

No dilution or cuvette needed in the detection process; 5 s can complete the test and display the result.

ELX- μ -500 added fluorometer mode, accurate quantitative nucleic acid concentration:

For samples with concentrations lower than 2 ng/ μ L, fluorometer mode can be selected and the minimum detection limit can be up to 0.5 pg/ μ L.

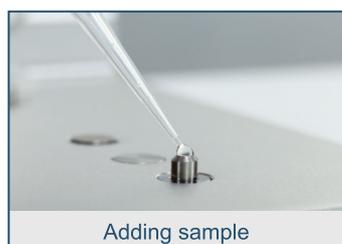
Single machine operation, convenient and efficient:

ELX- μ -100/ ELX- μ -300 / ELX- μ -500 is full-wavelength micro-spectrophotometer, and ELX- μ -400 is a fixed wavelength ultra-micro nucleic acid analyzer.

Applications

260 nm: dsDNA, ssDNA, RNA	595 nm: Bradford
280 nm: A280, BSA, IgG, Lysozyme	600 nm: Bacterial liquid concentration
562 nm: BCA	650 nm: Lowry

Operation Process



Specifications

Model No.:	ELX- μ -100	ELX- μ -300	ELX- μ -400	ELX- μ -500
Wavelength range	200~800 nm	200~800 nm	260 nm, 280 nm	200~800 nm
Minimum sample size	0.5~2.0 μ L	0.5~2.0 μ L	1.0~2.0 μ L	0.5~2.0 μ L
Path length	0.2 mm 1.0 mm	0.2 mm 1.0 mm	0.5 mm	0.05 / 0.2 mm 1.0 mm
Light source	Xenon flash lamp	Xenon flash lamp	UV LED	Xenon flash lamp
Detector type	2048-linear CCD array	2048-linear CCD array	UV-silicon photocell	2048-linear CCD array
Wavelength accuracy	1 nm	1 nm	----	1 nm
Spectral resolution	\leq 3 nm	\leq 3 nm	\leq 8 nm	\leq 3 nm
Absorbance precision	0.003 Abs	0.003 Abs	0.005 Abs	0.003 Abs
Absorbance accuracy	1 % (7.332 Abs at 260 nm)	1 % (7.332 Abs at 260 nm)	2 % (7.332 Abs at 260 nm)	1 % (7.332 Abs at 260 nm)
Absorbance range	0.04~90 A	0.04~90 A	0.2~50 A	0.04~300 A
Nucleic acid detection range	2~4500 ng/ μ L (dsDNA)	2~4500 ng/ μ L (dsDNA)	10~2500 ng/ μ L (dsDNA)	2~15000 ng/ μ L (dsDNA)
Measurement time	< 5 s	< 5 s	< 6 s	< 6 s
Dimension (WxDxH) mm	200x250x166	210x268x181	208x280x186	208x320x186
Weight	2.6 kg	2.8 kg	2.0 kg	3.6 kg
Sample pedestal material	Aluminum alloy and quartz fiber			
Operating voltage	DC 24 V 2 A			
Operating power	20 W	25 W	25 W	25 W
Standby power	5 W	5 W	5 W	5 W
Software compatibility	Win 7, Win XP, Win 8	Android system	Android system	Android system

Cuvette mode (OD600 measurement)

Light source	----	LED	LED	LED
Wavelength range	----	600 \pm 8 nm	600 \pm 8 nm	600 \pm 8 nm
Absorbance range	----	0~4 A	0~4 A	0~4 A

Fluorometer mode

Sensitivity	----	----	----	dsDNA: 0.5 pg/ μ L
Linear dynamic range	----	----	----	R ² \geq 0.995
Repeatability	----	----	----	\leq 1.5 %



ELX- μ -100



ELX- μ -300



ELX- μ -400



ELX- μ -500