

FD-100 Fluorometer



Product Description

Fluorescent Immunoassay technology has strong specificity, high sensitivity and good practicability, which is widely used to measure nucleic acids (dsDNA, Oligo, RNA), proteins (enzymes, receptors, antibodies), hormones, drugs and microorganisms and other low concentration bioactive compounds.

UltraDx Fluorometer is based on fluorescence immunoassay technology and the principle that the fluorescence intensity is proportional to the concentration at low concentrations, and to analyze samples qualitatively and quantitatively by detecting fluorescence intensity.

Technical Background

Our UltraNano series Micro-Spectrophotometer measure the concentration and purity of the sample, because it is able to measure the absorbance of the whole ingredient (such as DNA, RNA, oligos and so on) of the sample at 260nm, that may make the read inaccurate. While the fluorometer measure the fluorescence intensity of the fluorescent reagent which combine with the target molecule to read the concentration of sample. Generally, the read is lower than UltraNano series products but much accuracy than it.

The sensitivity of UltraNano series products are above 5ng/ul, and while the fluorometer is 0.5pg/ul in measuring DNA concentration. It is important and necessary for the most applications to read the lower and accuracy concentration of the sample. Using the FD-100 fluorometer with the quantitation kit can measure the sample concentration rapidly, sensitively and accurately.

Product Feature

- 7-inch color touch screen, easy to operate;
- Only 3s to detect the sample concentration;
- The minimum detection concentration can be 0.5pg/μL;
- Dual channels for detecting two kinds of fluorescence simultaneously;
- The response range can reach 5 orders of magnitude;
- It works for most reagents;
- Store up to 10000 pieces of data, which can be exported through U Disk or printer.

Technical Specification

Model	FD-100		
Sample Capacity	1	Sample Volume	1-20μl
Detector	Photodiode	Light Source	Monochrome LED
Tube Type	0.5ml PCR Tube	Channel Number	2
Measurement Time	3s	Repeatability	< 1.5%
Calibration Method	2 or 3 points calibration	Response Range	Five orders of magnitude
Linearity	R2 ≥ 0.995	Programs Stored	10000
Emission Wavelength	525/690 (standard) 460/620 (optional)	Excitation Wavelength	470/625 (standard) 365/525 (optional)
Data Export	U Disk	Data Format	CSV PDF
Display	LCD Touch Screen	Data Interface	USB(Type A)*2/(Type B)*1
Power Supply	100-240V, 50-60Hz	Power Consumption	4.5W
Voltage	DC12V 2A	Net Weight	1.0kg
Concentration Range	0.01ng/μl-120ng/μl dsDNA HS 0.05ng/μl-240ng/μl Oligo	0.2ng/μl-2000ng/μl dsDNA BR 0.1mg/ml-20mg/ml protein BR	

Order Information

Code	Description
	UltraDx® FD-100 Fluorometer
UB-FD 0101-S	UltraDx® high sensitivity dsDNA quantification kit (100 assays)
UB-FD 0101-S	UltraDx® high sensitivity dsDNA quantification kit (200 assays)
UB-FD 0101-S	UltraDx® high sensitivity dsDNA quantification kit (1000 assays)
UB-FD 0101-S	UltraDx® wide range dsDNA quantification kit (100 assays)
UB-FD 0101-S	UltraDx® wide range dsDNA quantification kit (200 assays)
UB-FD 0101-S	UltraDx® wide range dsDNA quantification kit (1000 assays)