![MBI Lab Equipment logo]

Microplate Reader
One-Stop Solution

MBI-EKDWZ-100 / MBI-EKDWZ-100-GS

MBI-EKDWZ-100 microplate reader is a high-quality microplate reader based on a monochromator with a wavelength range of 200~1000 nm. It can be used for spectral scanning, endpoint method and kinetic detection. Suitable for 96-well plates and 384-well plates with and without lids. FlexA-200 can be shaken and cultured in micro- plates, and the culture temperature is up to 45 °C.

It can be operated independently through the built-in software of the instrument, and also can be operated by the ReaderIt-II software.

⦿ High Quality Data and Stable Performance

The optional system makes sure the high quality data and stabilized performance of MBI-EKDWZ-100.

- Double beam optional system has the reference optional channel system, which make the data more stabilization;

- After the instrument is started, the light source, grating, detector, position, etc. are automatically calibrated to ensure stable and reliable operation of the instrument;

- Long life xenon lamp which can be used for 10^9 times.
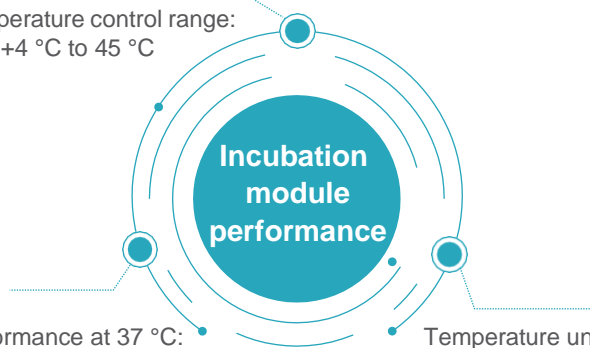
⦿ Choose Detection Wavelength Freely with Raster

MBI-EKDWZ-100adopts the xenon flash lamp as light source, which chooses the wavelength range from 200-1000 nm with 1 nm step by grating monochromator for the full spectrum scanning.

⦿ u-Nano Ultra-Micro Plate

- Quickly complete high-throughput quantification of micro nucleic acid and proteins without samples dilution;

- Independent lower computer software, can quickly read the sample concentration and purity report;

- 1~16 samples can be detected at the same time, only 2~4 μL sample volume is needed;

- During continuous testing, you only need to wipe off the last batch of samples with dust-free paper.

Temperature control range:
RT. +4 °C to 45 °C

Incubation module performance

11 Hz

Intermediate speed

Liner shaking function of microplate

Low speed

High speed

5 Hz

20 Hz

Performance at 37 °C:
Average temperature
difference between wells: ±0.5 °C

Temperature uniformity
of well plate: <1.0 °C (96-
well plate without cover)

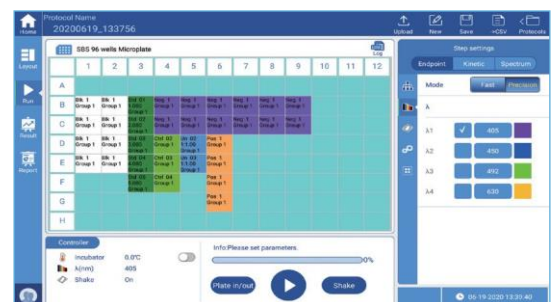## ◉ Cuvette Mode (MBI-EKDWZ-100-GS)

- Independent cuvette slot;

- Detection wavelength 200~1000 nm;

- With incubation function, RT+4 °C to 45 °C;

- Independent cuvette software can be directly used for endpoint method, kinetics, spectral scanning and standard curve establishment.

◉ MBI-EKDWZ-100 Instrument Interface Can Be UsedIndependently for Rapid Detection
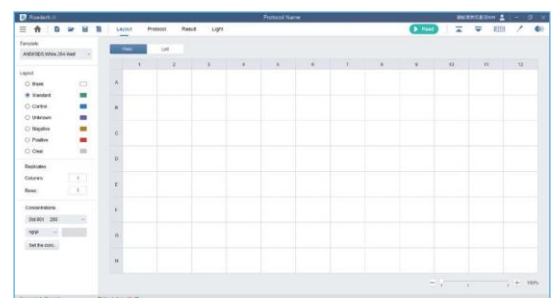
MBI-EKDWZ-100 built-in software is designed for independent use of the instrument. With a 10-inch high-resolution touch screen and a graphical user interface, the editing of programs and templatepresets are very simple.

In addition, support for USB data export is fast, convenient and easy to operate.

◉ Through PC Software, Advanced Detection Mode and Powerful Data Analysis Can Be Set
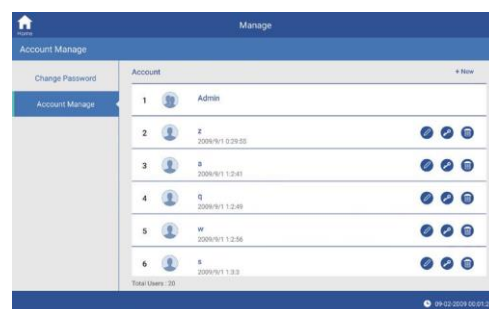
ReaderIt-II software designed with graphical operation interface has a simulation demonstration function. Data export is convenient and fast, and detailed result reports can be generated through built-in tools. The built-in software and ReaderIt-II of the MBI-EKDWZ-100 instrument are both Chinese/English interfaces. GUIis convenient for customers to use.

Microplate Reader

Powerful and Flexible Software

◉ User Authority Classification

- Administrator can manage the accounts of different sub-users, which is convenient for the account management of experimenters;

- Set up multiple user accounts and passwords to facilitate the confidentiality of experiments for different users;

- Only personal experiment content is left in the sub-account, which is convenient for experiment recording;

- No password is required for the guest account, and you can quickly enter the experimental program.
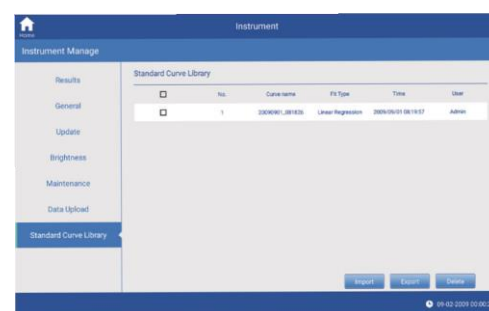
◉ Powerful Data Analysis And Process

- Provides multiple data processing methods including blank subtraction, standard curve creation, qualitative analysis, quality control, kinetics, and spectral analysis to help you obtain the analysis results you want.
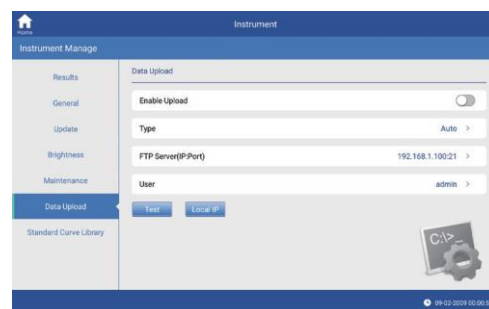
◉ Standard Curve Library

- The instrument is equipped with a standard curve library. The standard curve established in the first experiment can be stored in the standard curve library, which is convenient for direct being used in the next experiment. No need to build a standard curve every time, more convenient and faster.

◉ FTP (File Transfer Protocol)

- Upload instrument data directly to a computer with an FTP server, and users can view the data results at any time in the authorized folder.

◉ Multiple Report Export Types

- The instrument comes with four data file export modes: Excel, TXT, CSV, and PDF.

3-

Product Parameter

Model	MBI-EKDWZ-100 / MBI-EKDWZ-100-GS Microplate Reader
Display	10 inch high-resolution capacitive touch screen
Light source	Xenon flash lamp/number of flashes>10^9
Wavelength range	200~1000 nm
Wavelength accuracy	2 nm
Wavelength repeatability	0.2 nm
Optical system	Monochromator, 1 nm step
Reading range	0~4.0 OD
Bandwidth	<2.5 nm
Detection System	2 silicon photodetectors, one for measurement, one for reference
Linear @450 nm	$R^2 \geq 0.999$, [0.0 - 3.0 Abs]
Absorbance accuracy @450 nm	± (1.0 % + 0.003 Abs), (0 ~2.0 Abs]; ± 2.0 %, (2.0 ~ 2.5 Abs]
Absorbance repeatability @450 nm	CV<0.5 % or SD<0.003 accurate mode; CV<1.0% fast mode
Measuring speed	96-well plate: fast mode <8 seconds, accurate mode <28 seconds (end point method)
Shaking	Linear, 3 speeds adjustable
Temperature range	RT+4 °C to 45 °C
Temp. accuracy & uniformity	±0.5 °C @37 °C, ±0.5 °C @37 °C
User interface	Built-in software, independent use
Analysis software	ReaderIt-II software
Operation display	Touch screen input, Android system, 10-inch LCD display full board information, can be connected with keyboard and mouse
Internal storage	16 G storage, can store more than 20,000 data files
Port	1 type B USB interface, 2 type A USB interfaces, 1 network port
Robotic arm compatible	Temporarily incompatible
Power supply	DC24 V 6.67 A
Dimension	300×500×260 mm
Net weight	15.5 kg

Ordering Information

Code	Product Description	Code	Product Description
MBI-EKDWZ-100	MBI-EKDWZ-100 microplate reader	MBIZR-08900-91	u-Nano ultra-micro plate
MBI-EKDWZ-100-GS	MBI-EKDWZ-100-GS microplate reader	MBIZR-08900-92	ABS optical performance validation board
MBIZR-08900-90	ReaderIt-II analysis software		