# 05 FlexA-200 Microplate Reader



#### **Description**

FlexA-200 is a UV/Vis micro-plate spectrophotometer offering free wavelength selection, so being an ideal tool for virtually any photometric research application, such as DNA, RNA, protein analysis and more

It offers exceptional usability through its intuitive, user-friendly internal software and comprehensive ReaderIt-II Software.

FlexA-200 microplate reader has been designed to deliver high performance and high quality results with minimal user effort, It measures 96-and 384-well plates and plate shaking motion is linear

#### **Features**

#### 1. 10 inch touch screen, and offers stand-alone operation, it is easy to use

Intuitive, user-friendly internal software on a 10 inch touch screen for quick measurements. Easy and logical assays setup for demanding assays with the powerful PC software (ReaderIt-II), the PC software can offer to analysis, review, validate data. It is easy access to data via USB interface and WIFI

### 2. Freely selectable wavelengths from 200 - 1000 nm for the demands of various assays

Wavelength selection in FlexA-200 is done by using an advanced monochromator system. Any wavelength between 200 to 1000nm can be selected at any time. Using the spectral scanning feature, the whole spectrum of a sample be scanned in 1nm increments to allow identification of the optimal measurement wavelength for a new assay.

#### 3. Both microplate reading for any throughput requirements

It measures 96-and 384-well plates

#### 4. Flexibility and performance for various photometric applications

FlexA-200 microplate reader supports endpoint, kinetic and spectral scanning assays. It reads 96- and 384-well microplates with and without lids.

A broad wavelength range with the UV area, pathlength correction as well as fast spectral scanning makes it an ideal tool for any photometric research application, including DNA, RNA and protein analysis

#### 01

#### Choose detection wavelength freely with raster

FlexA-200 adopt the xenon flash lamp as light source, which choose the wavelength range from 200-1000nm with 1nm step by grating monochromator for the full spectrum scanning only needs 15 seconds each sample.

### <u>02</u>

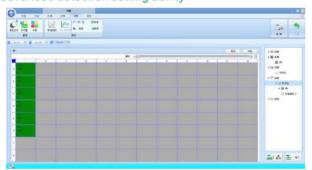
## Friendly operation interface which can complete fast detection in FlexA-200



The built-in software of FlexA-200 which has 10 inch high resolution touch screen and adopts the graphic interface, it makes the operations easy. In addition, you can use USB to export data

#### 04

# ReaderIt-II software has the strong data analysis and advanced detection setting ability



Graphic interface ReaderIt-II realized the simulation demonstration function. The data analysis function includes quantitative curve fitting, quantitative analysis, kinetics calculation, custom equation and 4 parameter fitting and so on. Data can be exported to Excel format easily, and the detailed report also can be exported by the built-in tools.

#### 04

#### Liner shaking function for microplate

1. Three options for the shaking speed: Low speed, Intermediate speed and High speed.

Low speed: 5Hz, amplitude 15mm

Intermediate speed: 11Hz, amplitude 3mm

High speed: 20Hz, amplitude 1mm

2. Shaking mode can be run in the kinetic progress.

#### 05

#### Incubator function

Temperature range: ambient +5°C to 45°C

**Heating up time:** heating up time from 25°C to 37°C is less than 45min (96 well plate without cover, 200ul water per well)

**Uniformity:** <1.0°C(96 well plate without cover, at 37°C)

Average temperature difference: ±0.5°C (at 37°C)

#### 06

#### High quality data and stabilized performance

The optical system makes sure the high quality data and stabilized performance of FlexA-200

- 1. Double beam optical system has the reference optical channel system, which make the data more stabilization.
- Self checking system make sure the device running stabilized.
- 3. Long life xenon lamp which can be used for 10<sup>9</sup> times.

#### <u>07</u>

#### Wide and convenient application

FlexA-200 can be used for spectrum scanning, end point and kinetic detection in 96/384-well plates.

#### Applications:

- 1. DNA/RNA quantitative and purity analysis
- 2. Protein quantitative
- 3. Enzymology and immune detection
- 4. Kinetic detection
- 5. Cell multiplication and cytotoxicity detection
- 6. Cell apoptosis detection
- 7. Report gene and GPCR detection

#### Easy to use:

- 1. Raster full wavelength which can be used for spectrum scanning to find the best detection wavelength.
- 2. Touch screen and built-in graphic interface software with android system make the operation easy.
- 3. Friendly used of Readerlt- PC software.
- 4. Fast reading mode only need time 10s for 96 well plate and 30s for 384 well plate.
- 5. Software upgrade for free.

#### 08

#### Energy saving mode

- 1. Stepper motor and incubator shut down.
- 2. Display turns darken.
- 3. Click any button to quit the energy saving mode.

Specification		
Display	10 inch touch screen	
Light source	Xenon flash lamp	
Wavelength range	200 - 1000 nm with 1 nm steps	
Wavelength Accuracy	±2 nm	
Tepetition	±0.2 nm	
Wavelength selection	Monochromator	
Read-out range	0 - 4.0 OD	
Half-bandwidth of filters	<2.5 nm	
Detector	two silicon photoelectric detector, one for measurement, another for reference	
Linearity @450nm	0 - 2.5 Abs, ±2% (96 well plates)	
Accuracy @450nm	1.0% + 0.005 Abs (0 - 2.0 Abs); 2.0% [2.0 - 2.5 Abs)	
Precision @450nm	CV < 0.5% accurate model; CV < 1.0% fast mode	
Test speed	10 seconds with 96-well plate (fast mode); 30 seconds with 96-well plate (accurate model)	
Plate shaking	Linear; three options for speed	
Test speed	15 seconds with 96-well plate (single wavelength); 30 seconds with 96-well plate (double wavelength	
Incubator	From ambient + 5°C to 45°C	
UI	Integrated software or PC control software	
Analysis software	ReaderIt-II	
User interface	Touch screen, android system, 10 inch touch screen, external keyboard mouse	
Storage	16G memory, more than 10,000 test records can be stored	
Ports	3 USB ports, for PC, printer and USB-disk	
Automated systems	Temporarily unable compatible with automated systems	
Power supply	DC24V 6.5A	
Dimensions(W×D×H)	300×500×290mm	
Weight	15kg	

Ordering information		
NO.	Code	Description
01	AS-19010-00	FlexA-200 Microplate Reader
02	AS-19011-01	ReaderIt-II Software
03	AS-16051-26	Printer
04	AS-16051-27	Printer Paper