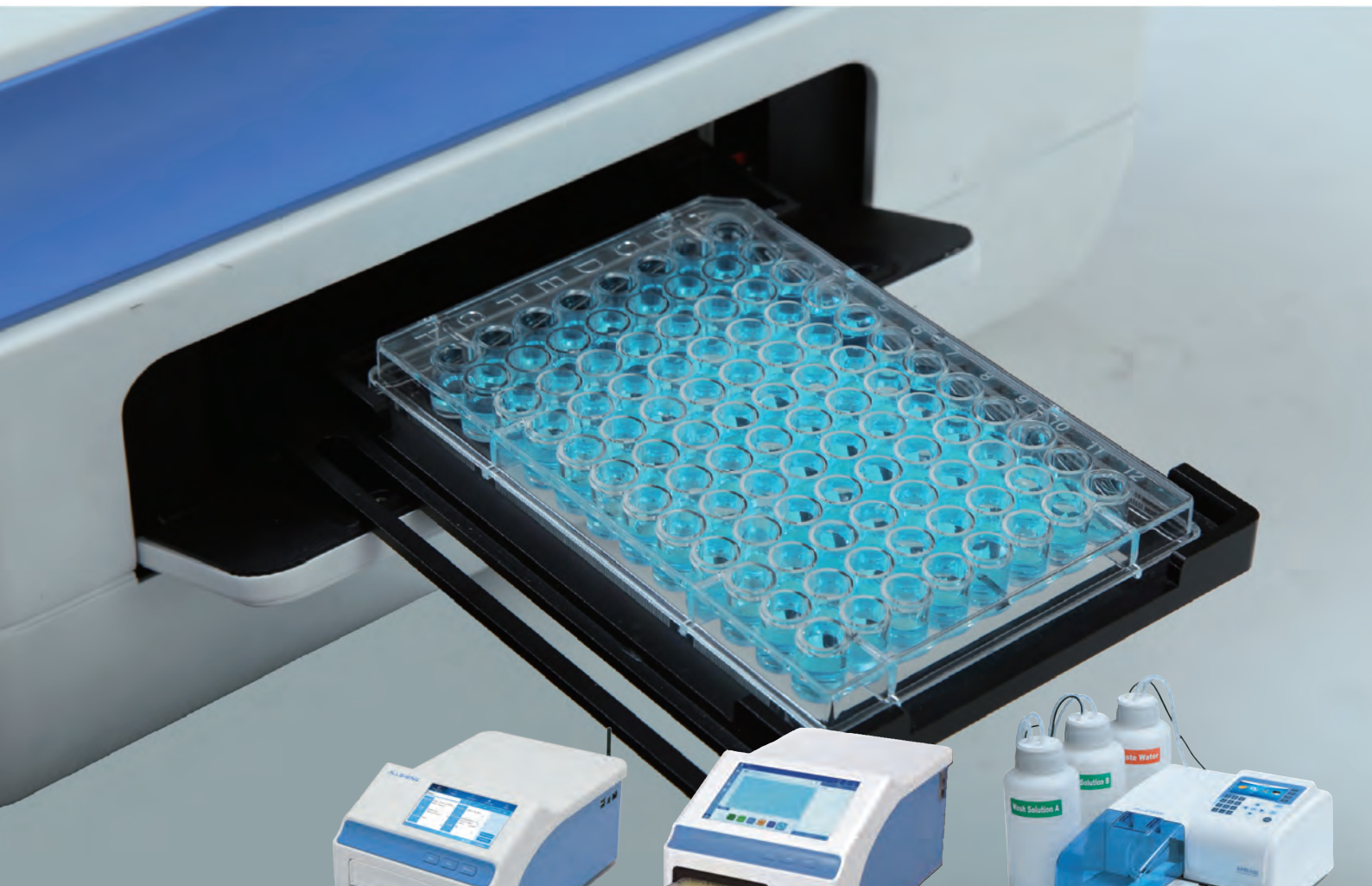




All for life science



AMR-100  
Microplate Reader

FlexA-200  
Microplate Reader

APW-200  
Microplate Washer

## Microplate Reader Series

# AMR-100 Microplate Reader

AMR-100 Microplate reader is a high-quality optical absorption microplate reader based on filters. Its wavelength range is 340-750 nm. It is suitable for scientific research and clinical application. It is suitable for 96 well plates and can meet the requirements of different channel.

## ■ Features

1. Easily use with 7 inch touch screen together with 3 external keys.
2. Able to use individually or connect with PC and controlled by an android tablet and the results can be putout.
3. Absorbance range: 0.0~4.000Abs, meeting different needs.
4. 8 positions optical filter wheel, equipped with 4 standard filters, other filters are optional.
5. Built-in software can provide control program and data analysis, can connect with U-disk.
6. Fast and accurate measurement of 96-well plates within 6 seconds.

## ■ Specification

|                           |   |
|---------------------------|---|
| Display                   | 7 inch touch screen (800x480 dots)  |
| Light source              | Quartz-halogen lamp 6V/10W  |
| Wavelength                | 340nm~750nm   |
| Half-bandwidth of filters | 8~10 nm   |
| Optical filters           | 8 positions optical filter wheel, equipped with 4 standard optical filters; 450nm, 492nm, 630nm, other filters are optional |
| Read-out range            | 0~4.000Abs  |
| Linearity (405nm)         | 0~3.0Abs, ±1%; 3~4.0Abs, ±2%  |
| Resolution                | 0.001Abs  |
| Accuracy (405nm)          | ±1% (0-3Abs); ±2%[3-4Abs)   |
| Precision(405nm)          | CV≤0.2% (0-3Abs); CV≤1% [3-4Abs)  |
| Test speed                | 6s, 96-wells plates, fast measurement mode; Single wavelength <15s/96well, dual wavelength <28s/96well                      |
| Sensitivity / Detector    | ≥0.010 / Photodiode   |
| User interface            | Integrated software or PC control software  |
| Storage                   | 200 programs and 100,000 test records   |
| Ports                     | 3USB ports, for PC, printer and USB-disk  |
| Power supply              | AC 100-240V, 50-60Hz, 2A  |
| Dimensions(WxDxH)         | 440x295x225mm   |
| Weight(kg)                | 10kg  |

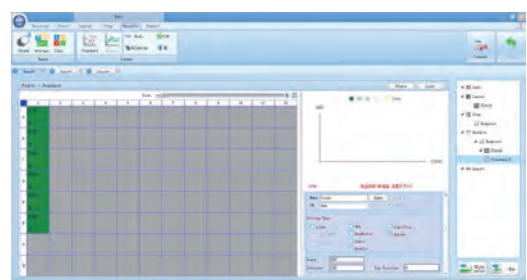


## ■ AMR-100 Highlights

1. Easy of use with 7 inch touch screen , simple and intuitive operation. No need to operate keyboard.
2. It keeps with high visual, convenient and practical.
3. It is equipped with standard control and data analysis software ReaderIt-I, data detection, convenient and fast; powerful data analysis function and excellent results report, not only can run independently, but also can run analysis on computer and Pad.
4. Convenience:replace light source and filter without opening the shell.



AMR-100 Operation Interface



ReaderIt-I Software interface

## FlexA-200 Microplate Reader

FlexA-200 full-wavelength Microplate reader is a high-quality Microplate reader based on grating monochromator with a wavelength range of 200-1000 nm. It can be used for spectroscopic scanning, endpoint method and kinetic detection. It is suitable for 96 well plates and 384 well plates with or without cover. FlexA-200 can be shocked and cultured by microporous plate, and the highest temperature of culture is up to 45 °C.

FlexA-200 Microplate reader can be operated independently by the built-in software of the instrument, and can be controlled by PC using ReaderIt-II software.



### ■ Specification

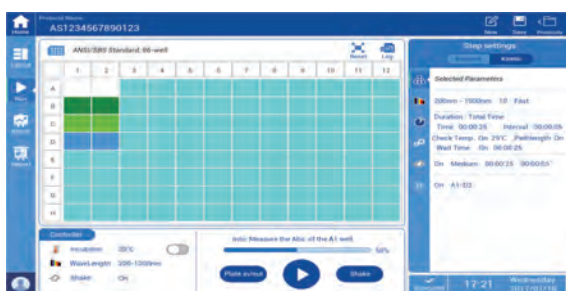
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| Display                   | 10 inch touch screen   |
| Light source              | Xenon lamp   |
| Wavelength range          | 200 - 1000 nm with 1nm   |
| Wavelength accuracy       | ±2 nm  |
| Wavelength repeatability  | ±0.2 nm  |
| Wavelength selection      | Monochromator  |
| Reader-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% accuracy model; CV < 1.0% fast model   |
| Test speed                | 10 seconds with 96-well plate (fast mode); 30seconds with 96-well plate (accurate model)           |
| Plate shaking             | Linear; three options for speed  |
| Test speed                | 15 seconds with 96-well plate (single wavelength); 30seconds with 96-well plate(double wavelength) |
| Incubator                 | From ambient +5°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 10000 test records can be stored   |
| Ports                     | 3 USB ports, for PC, USB-disk, printer   |
| Automated systems         | Temporarily unable compatible with automated systems   |
| Power supply              | DC24V 6.5A   |
| Dimension(W*D*H)          | 300x500x290mm  |
| Weight                    | 15kg   |

### 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.

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

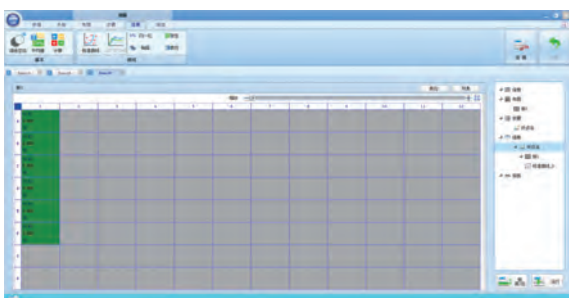
The built-in software of Flex-200 which has 10 inch high resolution touch screen and adopts the graphic interface, it make the operations easy. In addition, you can use USB to export data.



### 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.

FlexA-200 instrument built-in software and ReaderIt-II software are both Chinese/English interface intuitive graphical interface is convenient for customers to use.



### 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.
2. Self checking system make sure the device running stabilized.
3. Long life xenon lamp which can be used for  $10^9$  times.

### Incubator function

Temperature range: ambient  $+5^{\circ}\text{C}$  to  $45^{\circ}\text{C}$ .

Average temperature difference:  $\pm 0.5^{\circ}\text{C}$  (at  $37^{\circ}\text{C}$ ).

Uniformity:  $< 1.0^{\circ}\text{C}$  (96 well plate without cover, at  $^{\circ}\text{C}$ ).

### Liner shaking function for microplate

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.

### 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.

Easy to use:

1. Raster full wavelength which can be used for spectrum scanning to find the best detection wavelength.
2. Small bandwidth ( $< 2\text{ nm}$ ) and higher wavelength accuracy
3. Touch screen and built-in graphic interface software with android system make the operation easy.
4. Friendly used of ReaderIt-PC software.
5. With the function of incubation oscillation, Heating lid incubation reduces liquid evaporation.
6. Software upgrade for free.

### Energy saving mode

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



# APW-200 Microplate Washer

Microplate washer is an automatic plate washer for washing 96-well microplate .compact construction ,efficient washing and durable , it is suitable for the washing of flat bottom , U-shaped bottom , v-shaped bottom , c-shaped bottom of various specifications .It has various special functions selected and matched by other board washer .The programmed design is especially suitable for laboratory with heavy workload of multi-application of microplate .It can also be used to soak and shock.



## ■ Features

1. Low residual liquid, each well  $\leq 1\mu\text{L}$ .
2. 4.3 inch color LCD display, easy to operate .
3. Microplate can be soaked and shocked simultaneously.
4. Strainer in the pipeline and automatic washing functions avoid the liquid blocking the pipeline.
5. Pipeline flushing and distilled water washing functions can be set, flushing time and number of spacers can be adjusted.
6. With pause function, you can continue to complete the rest of washing procedures.
7. Washing bottle has uniform volume calibration line, alarm function to avoid the washing liquid used up or waste liquid from overflow.
8. 100 programs can be save.

## ■ Specification

|                           |  |
|---------------------------|--|
| Residual liquid           | $\leq 1\mu\text{L}$                                  |
| Washing heads             | 1x8 or 1x12 heads                                    |
| Plate types               | Flat , U , V , C bottom                              |
| Washing method            | Sling-point, two-point and multi-point               |
| Washing volume            | 50-2000 $\mu\text{L}$ , increase by 50 $\mu\text{L}$ |
| Washing times             | 1~99 times   |
| Washing channels          | 3  |
| Bottles                   | 3pcs 2.5Lwashing bottle,1pcs2.5Lwashingbottle        |
| Dispense accuracy         | $\leq 2\%$ @300 $\mu\text{L}$                        |
| Liquid injection accuracy | $\text{CV}\leq 1.5\%$ @300 $\mu\text{L}$             |
| Soaking and shaking time  | 99'00"   |
| Date connection           | USB  |
| Weight                    | 12kg   |
| Power supply              | AC110/240V; 50/60Hz                                  |

## ■ APW-200 Highlights

### Easy Operation

The APW-200 Microplate Washer has 4.3 inch LCD display with friendly interface, U-disk can be to Transfer the dates between the PC and the washer Or between two washers,it can also be used to Upgrade the software. The washing head can be replaced easily for different kinds of microplates.

### Safety and reliable feature

The APW-200 Microplate Washer is equipped with liquid position sensor to avoid the washing liquid used up or waste Liquid from overflow, minimize the risk and avoid the Liquid being sucked into the pump to break the equipment. Besides it has shaking function, which can improve the washing efficiency.

## ■ AMR-100 Microplate Reader

| Code        | Description               |             |                      |
|-------------|---------------------------|-------------|----------------------|
| AS-16050-00 | AMR-100 Microplate Reader | AS-16051-17 | Optical filter 510nm |
| AS-16051-01 | Optical filter 340nm      | AS-16051-18 | Optical filter 520nm |
| AS-16051-02 | Optical filter 380nm      | AS-16051-19 | Optical filter 532nm |
| AS-16051-03 | Optical filter 405nm      | AS-16051-20 | Optical filter 546nm |
| AS-16051-04 | Optical filter 415nm      | AS-16051-21 | Optical filter 560nm |
| AS-16051-05 | Optical filter 450nm      | AS-16051-22 | Optical filter 562nm |
| AS-16051-06 | Optical filter 492nm      | AS-16051-23 | Optical filter 600nm |
| AS-16051-07 | Optical filter 540nm      | AS-16051-24 | Optical filter 620nm |
| AS-16051-08 | Optical filter 570nm      | AS-16051-25 | Optical filter 646nm |
| AS-16051-09 | Optical filter 578nm      | AS-16051-26 | Optical filter 663nm |
| AS-16051-10 | Optical filter 590nm      | AS-16051-27 | Optical filter 700nm |
| AS-16051-11 | Optical filter 595nm      | AS-16051-28 | Optical filter 750nm |
| AS-16051-12 | Optical filter 630nm      | AS-16051-50 | Replacement Lamp     |
| AS-16051-13 | Optical filter 650nm      | AS-16051-51 | Printer              |
| AS-16051-14 | Optical filter 690nm      | AS-16051-52 | Printer paper        |
| AS-16051-15 | Optical filter 470nm      | AS-16051-53 | Calibration Plate    |
| AS-16051-16 | Optical filter 490nm      | AS-16051-54 | ReaderIt-I software  |

## ■ FlexA-200 Microplate Reader

| Code        | Description                 |
|-------------|-----------------------------|
| AS-19010-00 | FlexA-200 Microplate Reader |
| AS-19011-01 | ReaderIt-II Software        |
| AS-16051-26 | Printer                     |
| AS-16051-27 | Printer Paper               |

## ■ APW-200 Microplate Washer

| Code        | Description                                 |
|-------------|---|
| AS-16020-00 | APW-200 Microplate Washer 110V-240V,50/60Hz |
| AS-16011-01 | 8 needles washing head                      |
| AS-16011-02 | 12 needles washing head                     |
| AS-16011-03 | Washing bottle                              |
| AS-16011-04 | Waste liquid bottle                         |



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