

# AMR-100 / AMR-100T

## Microplate Reader



### Product Introduction

AMR-100 / AMR-100T is a high-quality light absorption microplate reader based on a filter, with a wavelength range of 340 nm~750 nm, suitable for scientific research and clinical applications. 7-inch touch screen color LCD display, no keyboard required, easy to use.

AMR-100T has additional incubation function, with temperature range is from RT. +4 °C to 50 °C

### Features

1. High-resolution 7-inch color touch screen, easy to operate, no keyboard required, easy to use
2. Multiple software configuration, which can be used as a single machine or connected with a computer, and the results are exported in real time
3. Absorbance range: 0.0~4.000 Abs, meeting different measurement requirements
4. 8-position filter wheel, standard 4 filters, optional other filters
5. The built-in software can provide instrument control and data analysis, and can be directly connected to a U disk
6. The detection speed is fast, and the whole 96-well microplate detection can be completed within 6 seconds



AMR-100T Operation Interface

### AMR-100 / AMR-100T Unique Advantages

1. High-resolution 7-inch touch screen, simple and intuitive operation, no keyboard required
2. Visual layout, convenient and practical
3. The microplate reader is equipped with the standard control and data analysis software ReaderIt-I, which is convenient and quick for data detection
4. Powerful data analysis function and excellent result report, not only can run the analysis independently, but also run the analysis on the computer



ReaderIt-I Software Interface

## Specification

Model	AMR-100	AMR-100T
Display	7 inch high resolution capacitive touch screen	
Light source	6 V, 10 W halogen lamp	
Wavelength range	340 nm ~ 750 nm	
Optical filter	8-position filter wheel, standard 4 filters: 405 nm, 450 nm, 492 nm, 630 nm	
Absorbance range	0-4.0 Abs	
Resolution	0.001 Abs	
Linear range	$R^2 \geq 0.995$ absorbance range 0~3.0 Abs	$R^2 \geq 0.995$ [0,3 Abs]
Wavelength accuracy	$\leq \pm 2$ nm	
Absorbance repeatability	$CV \leq 0.3\%$ [0,3 Abs]; $CV \leq 1\%$ [3,4 Abs]	
Absorbance stability	$\leq 0.005$ Abs [0,3 Abs] $\leq 2.0\%$ [3,4 Abs]	$\leq \pm 0.005$ Abs [0,2 Abs] $\leq 0.3\%$ [2,3 Abs] $\leq 2.0\%$ [3,4 Abs]
Absorbance accuracy	$\leq \pm 0.005$ Abs [0,2 Abs] $\leq \pm 0.01$ Abs [2,3 Abs] $\leq \pm 1.5\%$ [3,4 Abs]	$\leq \pm 0.005$ Abs [0,2 Abs] $\leq \pm 1\%$ [2,3 Abs] $\leq \pm 1.5\%$ [3,4 Abs]
Sensitivity / detector	$\geq 0.01$ A / photodiode	
Measuring speed	6 s / 96-well plate, fast mode; single wavelength <15 s / 96-well, dual wavelength <28 s / 96-well (common mode)	
Incubation temperature range	--	RT. +4 °C ~ 50 °C
Temperature accuracy	--	$\pm 0.5$ °C @ 37 °C
Temperature uniformity	--	$\pm 0.5$ °C @ 37 °C
User Interface	Built-in software, touch screen input, external mouse	
Internal storage	Can store 1000 measurement programs and measurement results	
Port	3×USB ports, connecting computer, printer and USB drive	
Power supply	AC 100-240 V, 50-60 Hz, 2 A	
Dimension (W×D×H)	295×440×225 mm	
Net weight	10 kg	11 kg

## Ordering Information

Code	Description
AS-16050-00	AMR-100 microplate reader
AS-16060-00	AMR-100T microplate reader
AS-16051-01	Optical filter 340 nm
AS-16051-02	Optical filter 380 nm
AS-16051-03	Optical filter 405 nm
AS-16051-04	Optical filter 415 nm
AS-16051-05	Optical filter 450 nm
AS-16051-06	Optical filter 492 nm
AS-16051-07	Optical filter 540 nm
AS-16051-08	Optical filter 570 nm
AS-16051-09	Optical filter 578 nm
AS-16051-10	Optical filter 590 nm
AS-16051-11	Optical filter 595 nm
AS-16051-12	Optical filter 630 nm
AS-16051-13	Optical filter 650 nm
AS-16051-14	Optical filter 690 nm
AS-16051-15	Optical filter 470 nm
AS-16051-16	Optical filter 490 nm

Code	Description
AS-16051-17	Optical filter 510 nm
AS-16051-18	Optical filter 520 nm
AS-16051-19	Optical filter 532 nm
AS-16051-20	Optical filter 546 nm
AS-16051-21	Optical filter 560 nm
AS-16051-22	Optical filter 562 nm
AS-16051-23	Optical filter 600 nm
AS-16051-24	Optical filter 620 nm
AS-16051-25	Optical filter 646 nm
AS-16051-26	Optical filter 663 nm
AS-16051-27	Optical filter 700 nm
AS-16051-28	Optical filter 750 nm
AS-16051-50	Halogen lamp
AS-16051-51	Printer
AS-16051-52	Printer paper
AS-16051-53	ABS optical performance validation board
AS-16051-54	ReaderIt-I analysis software