# SmartReader™ 96 Microplate **Absorbance Reader**





- Intuitive, 7 inch color touch screen control panel
- → Filter based system, wavelength range from 340 to 750nm
- → Stand alone system, with USB flash drive for data transfer
- → Absorbance range: 0.0 to 4.000 Abs
- → Integrated, multispeed plate shaker

New model, MR9600-T, now available with temperature control for plate incubation.

### Ordering Information:

Item No.*	Description:
MR9600*	SmartReader™ 96 Microplate Absorbance Reader for 96 well plates, 115V
MR9600-T*	SmartReader™ 96 Microplate Absorbance Reader, with Temp. Control, 115V
MR9600-PC	SmartReader PC Software for MR9600 and MR9600-T
MR9600-TP	Thermal Printer for SmartReader 96

\*115V with US plug. For 230V (EU plug), add (-E).

## Technical Data:

Control and Display:	7" touch screen, 800 x 480 pixels
Light Source:	Quartz halogen lamp, 6V/10W
Wavelength Range:	<b>340-750nm</b> (405, 450, 492 and 630nm filters included)
Read Speed:	<6 sec. for 96 well plate
Temp. Control:	+5 to 50°C / Accuracy ±0.5°C @ 37°C Uniformity ±0.5°C @ 37°C
Shaking:	3 modes: slow (3.5Hz), medium (4.7Hz), fast (7.0Hz)
Dimensions: (W x D x H)	11.6 x 17 x 8.75 in. 29.5 x 44 22.5 cm
Weight:	22 lbs (10kg)
Electrical:	115V or 230V, 50Hz to 60Hz
Warranty:	2 years

# SmartReader™ UV-Vis Microplate **Reader**



- → Intuitive color touch screen control
- → Accepts both 96 and 384-well plates
- Monochromator system, wavelength range 200-1000nm
- Stand-alone system with USB flash drive for data transfer



SmartDrop™ plate for checking nucleic acid and protein concentration/purity using small sample droplets.

## Ordering Information:

Item No.*	Description:
MR9610*	SmartReader™ UV-Vis Microplate Reader, for 96 and 384 Well Plates, 115V
	*115V with US plug For 230V (EU plug) add (-E)

#### Technical Data:

	Plates Accepted:	96-well and 384-well flat bottom, and SmartDrop™ plate
	Control and Display:	10" touch screen
	Light Source:	Xenon Flash Lamp
	Wavelength Range:	200-1000nm with 1nm steps
	Wavelength Selection:	Monochromator
	Plate Shaking:	Linear; three options for speed
	Incubator:	From ambient + 5°C to 45°C
	Ports:	3 USB ports, for PC, printer and flash drive
	Dimensions: (W x D x H)	12 x 19.5 x 11.5 in. 300 x 500 x 290 mm
i	Weight:	33 lbs (15kg)
ı	Electrical:	DC24V, 6.5A (100 to 240 VAC input)
	Warranty:	2 years



# SmartWasher™ 96 Microplate **Washer**



- → Quick set up and easy programming
- Compatible with U, V, C, and flat bottom 96 well plates
- + Flexible programming for full plate, partial plate, or strip washing
- Choose 8-channel or 12-channel wash head
- Individually controlled wash and rinse sources

Research requires flexibility – the SmartWasher™ 96 provides it. Full plates, partial plates, and strips with U, V, C, or flat bottoms are accepted by this fully automated washer. Multiple aspiration point settings allow for minimal residual liquid in the wells after aspiration. All parameters, including dispense volume, suction time, soak and shake cycles, and shaking speed are easily programmed using the large 4.3″ LCD display and keypad. Up to 100 wash protocols can be stored on board the SmartWasher™ 96 and recalled when needed, or transferred between machines with a flash drive.

The washer comes equipped with 2 wash bottles, 1 rinse bottle and a waste bottle. All have sensors that alert the user when the solutions are low, or in the case of the waste bottle, when it needs to be emptied. An auto-rinse function primes the dispensing tube and wash heads to prevent cross contamination and clogs.

8- and 12-channel manifolds (purchased separately) accommodate plates in either orientation. A transparent, acrylic shield surrounds the wash area, allowing for visualization of the plate. Should a spill or leak occur, the beveled spill well ensures that the liquid is extracted immediately to avoid cross-contamination.

The SmartWasher™ 96 is the perfect partner for the SmartReader™ 96 Microplate Absorbance Reader as well as other popular readers.



8- and 12-channel manifolds, purchased separately, are available to accommodate different plate orientations

## Ordering Information:

Item No.	Description:
MW9600*	SmartWasher 96 for 96 Well Plates, 115V (Wash heads sold separately
MW9600-8CM	8 channel manifold
MW9600-12CM	12 channel manifold

#### Technical Data:

Control and Display:	4.3-inch LCD display
Wash Heads:	8 channel or 12 channel
Wash Modes:	1 point, 2 point, or 3 point aspiration
Compatible Micro- plates:	96 wells, standard SBS dimensions
Residual Liquid Volume:	≤ 1ul (each well)
Dispensing Volume Range:	50ul – 2000 ul
Wash Cycles:	1 ~ 99 cycles
Program Storage Capacity:	100 programs
Rinse Function Time Range:	00:00 ~ 03:59 (mm : ss)
Soak & Shaking Time Range:	00:00 ~ 99:00 (mm : ss)
Wash Bottle Level Warning:	Yes, sensors included in wash and rinse bottles
Wash Solution Channels:	3 bottles
Waste Bottle Level Warning:	Yes; sensors detect when waste bottle is full
Waste Application:	Yes
Dimensions: (W x D x H)	13.5 x 18 x 8.5 in. 345 x 460 x 200 mm
Weight:	25.3 lbs (11.5kg)
Electrical:	115V or 230V, 50Hz to 60Hz

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