

# Flexibility for a wide range of absorbance assays



- Intuitive, 10-inch color touch screen control panel
- Accepts both 96 & 384-well plates
- Monochromator-based system
  - No filters required
  - Wavelength range from 200 to 1000 nm
- Stand-alone design
  - No PC or special software required
  - USB port for flash drive data transfer



# SMARTREADER™ UV-Vis

The Accuris SmartReader™ UV-Vis Microplate Reader (model MR9610) has been designed with ease-of-use and fast results in mind. This instrument brings extensive capabilities to the lab bench and is designed for the busy lab with multiple users. The large touch screen command center is extremely user-friendly and allows for fast set up of new protocols, as well as modifying and running existing protocols.

## Monochromator technology ... no filters needed!

The monochromator-based optical system allows for precise selection of wavelengths from 200nm to 1000nm, with no filters required. This range makes the SmartReader UV-Vis™ useful not only for typical ELISA, Bradford Lowry, and turbidity assays but also for more advanced applications such as quantitation of nucleic acids and proteins. The SmartReader™ UV-Vis can be set for Endpoint, Kinetic and Spectral Scanning assays.

#### **High Throughput Capability**

The MR9610 is designed for efficient processing of multiple samples and accepts standard 96 well plates as well as 384 well plates for high density screening (MR9611 includes cuvette port). The plate layout interface allows for a quick and intuitive setup of a plate well's contents. Users can highlight and label multiple wells to save time. The display shows a graphical representation of the plate. Users can label each well as required for: "known standard", "unknown sample", "blank well", "QC Control well", "positive control", "negative control", and "empty".



96-well Plate Layout Screen



96-well Reading Result Screen

#### Optimized results with plate shaking and incubation

Cuvette port, available on the M9611 model

Controllable plate shaking and incubation allow for optimization of assay results. The shaking speed can be controlled at different intensities with options for timed and pulsed shaking before a reading, or in between readings when performing a kinetic assay. The linear motion efficiently and uniformly mixes all samples in both 96 and 384 well plates.

Temperature can be controlled from ambient +5°C up to 45°C, allowing for the processing of enzyme kinetics, and bacterial growth assays.

### **SmartDrop™** Accessory Plate

Absorbance measurements of exceptionally small volumes (<0.5ul) can be achieved using the **SmartDrop**™ **Accessory Plate**. The *SmartDrop*<sup> $\intercal$ </sup> plate accommodates up to 16 samples and is ideal for checking nucleic acid concentrations and purity for Next Gen Sequencing, or protein concentrations.



**SmartDrop™** Accessory Plate



Monochromator



**Thermal Printer Available** 



**Available** 

Touchscreen







## SMARTREADER™ UV-ViS

Ordering Information		
MR9610 *	SmartReader™ UV-Vis Microplate Absorbance Reader, 115V	
	SmartReader™ UV-Vis Microplate Absorbance Reader with cuvette	
MR9611*	port, 115V	
Accuris™ MR9610 Microplate Reader Accessories		
MR9610-SDP	SmartDrop™ Accessory Plate for MR9610	
MR9610-PC	SmartReader™ PC Software for MR9610	
MR9600-TP	Thermal Printer for MR9600/MR9610	
MR9600-PA	Extra paper rolls for MR9600-TP printer, pk/4	

#### **Technical Specifications:**

Model	MR9610, SmartReader™ UV-Vis
Plates accepted	96-well and 384-well flat bottom (MR9611 model includes cuvette port)
Display	10-inch high resolution color touch screen
Controls	Touch screen and mouse
Light source	Xenon Flash Lamp
Wavelength range	200 - 1000 nm with 1 nm steps
Wavelength Precision	±0.2 nm
Wavelength selection	Monochromator
Read-out range	0 - 4.0 OD
Bandwidth	<2.5 nm
Detector	Dual silicon photoelectric detectors for measurement and reference
Linearity @450nm	$R^2 \ge 0.999 (0.0 - 3.0 \text{ Abs})$
Accuracy @450nm	1.0% + 0.003 Abs (0 - 2.0 Abs) ; 2.0% [2.0 - 2.5 Abs)
Precision @450nm	CV < 0.5% in precision model CV < 1.0% fast mode
Measurement speed	96 well plate: <8 seconds (fast mode); <28 seconds (precision mode) 384 well plate: <74 seconds (only precision mode available for 384)
Plate shaking	Linear; three options: (16.8Hz, 1mm), (6.68Hz, 3mm), (2.44Hz, 15mm)
Incubator	From ambient + 5°C to 45°C
User Interface	Integrated software, control by touch screen (PC control software optional)
Analysis software	PC Software available for connected Windows™ PC
Storage	16G memory, more than 10,000 test records can be stored
Ports	B-type USB port for PC connection Ethernet port A-type USB ports for mouse and printer connections
Power supply	Included power adapter: DC24V 6.67A, AC 100V-240V
Dimensions(W×D×H)	300×500×260mm / 11.8 x 19.7 x 10.25 inches
Weight	15.5kg / 34 Lbs.



<sup>\*</sup> Add "-E" to part number for 230V input