

ENVIRONMENTAL MONITORING

MacroScan II





Information brochure (2022)

Shape the future of Automatic reading

INTRODUCTION



Imagine how much you would benefit from clear, reliable and highly detailed photos of your cell-based assays. Think of how much time would they save you. And how much more accurate your analyses would be.

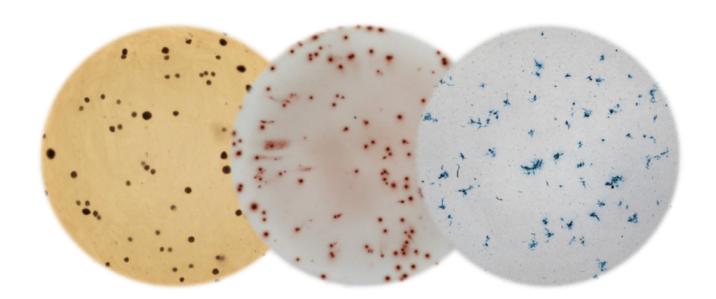
We imagined all this too. Then we created a system to deliver it. We call it the MacroScan II.

The MacroScan II is designed for labs with relatively low throughput, and for use as a system dedicated to R&D. It accepts only a single plate at a time, whether this plate has 6, 12, 24, 48 or 96 wells.

Looking to raise your productivity? Find out what the MacroScan II RL and the ScanLab II CC offer you.



Book your free demonstration at microtechnix.com



Types of lab assays

The MacroScan II series is designed to perform all common cell-based assays, all functional assays and all lab assays. Run your analyses on the basis of colourimetry, luminescence or fluorescence in no time.

- ✓ PRNT and MicroPRNT assays
- Seroneutralisation assays
- ✓ Titration assays
- ✓ ELISPOT
- Opsonophagocytic assays
- Serum bactericidal assays



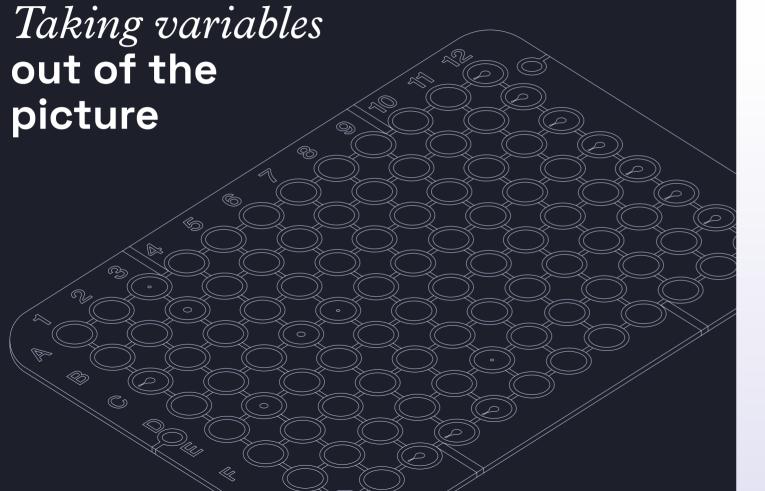












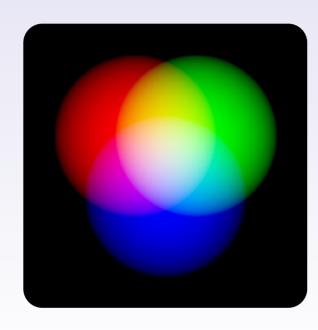
The optics

The most accurate results come from the most accurate images. Every product in the MacroScan II series uses a ZEISS stereomicroscopy camera that is completely digitally controlled. It takes high-definition images of your assays, perfect for raising the accuracy of your counts and ensuring every detail in every well is identifiable.



RGB calibration

The ScanLab II+ CC uses mean red, blue and green density values to ensure perfect calibration. These parameters add to the accuracy of your images. Whether they're preset or customised, they are stored in a file that you—or colleagues anywhere in the world—can call up when it's time to validate your images or run further assays.

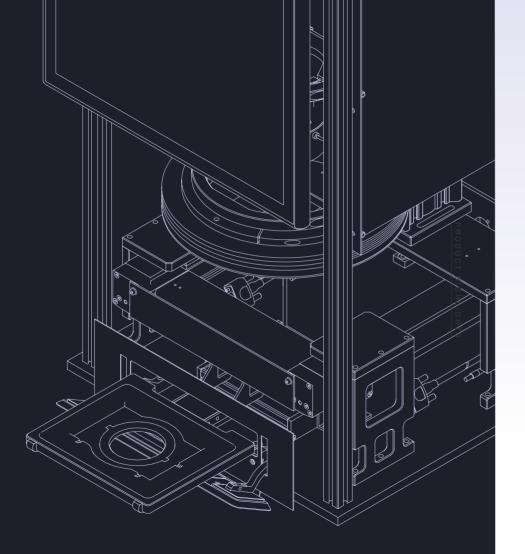


PRODUCT HIGHLIGHTS

Automated microscopy

Light. Exposure time. Image resolution and image size, compactness, bulkiness and hundreds of other variables influence the image you create. That's why the MacroScan II series records all the parameters under which an image was taken. The parameters in the digital file tell your MacroScan Il system exactly how to recreate the same conditions, eliminating variables. Every aspect of the MacroScan II camera is either fixed or mechanically controlled, so you benefit from pinpoint accuracy in all your assays.





Consistency

These calibration parameters are not just valid for your system, nor are they just for the MacroScan II series. They will work with any MicroTechniX hardware, anywhere in the world. We offer you consistency across multiple systems. Assay validation has never been so easy.



Teach & Read

The MacroScan II uses **Teach & Read Microtechnix application** to acquire high grade quality images and apply the set of parameters specific to your positive samples.

How does it work? With amazing simplicity. You just need to click on region of interest. One click qualifies them as positive. As you click on each positive agent, the software updates up to 40 different parameters, ranging from size to contrast levels and of course, the contours of an agent. It then identifies automatically other agents in the image that fit these criteria, keeping count so you don't have to.

Teach & Read for ultimate validation

Saving these parameters means you're able to retrieve the file at a later date. This allows you to run the same assay, with the exact same parameters, on other images. And not just in your lab. The saved file is easily sent to any lab, anywhere in the world. A great way to ensure consistency. And the fastest, easiest and most accurate assay validation you've ever seen.



Sample capacity	1 sample. (This can be increased with extra sample-plate stackers; see MacroScan II RL.)
Templates	✓ 1 image per sample
	✓ Well-by-well acquisition of 6-, 12-, 24-, 48- and 96-well plate
Camera	3 or 5 Megapixel Zeiss Axiocam® camera (model 503 or 506)
Microscope	Carl Zeiss Zoom microscope AxioZoom®.V16
Measurements (W x D x H)	526 x 498 x 810 mm
Gross weight (without options)	50 kg
Type of plates accepted	SBS plate format
Interface	19" inch touch screen (IP65)
Data export	.csv, .xls, .pdf, .mp4 video, .jpeg, .png, .bmp, .tiff and Zeiss ZVI
Climate Control unit	ThermoFisher Cytomat™ 10 C Series Automated Incubators
Optional equipment to increase capacity	External robot loaders. (See also MacroScan II RL)
Accessories available	Barcode readers, incubators, stackers, robot integration.
Operating system	Windows 10
Software integrations	Icarus, ACDE 2.0, Teach & Read
Warranty	1 year warranty
Voltage and frequency	100-240Vac~/50-60Hz
Compliance	21 CFR Part 11; "ALCOA+" principle for Data Integrity

Product range

MacroScan II

- ✓ Manual loading
- ✓ 1 microplate





3 ScanLab II+ CC

- ✓ Climate Control (10-37°C)
- Automatic loading
- ✓ Random access up to 189 microplates



2 MacroScan II RL

- Automatic loading
- ✓ Up to 80 microplates

LOADING CAPACITY





Our mission

At MicroTechniX, we are committed to providing innovative, user-friendly solutions that make life easier in your lab. Through our high-end components, we ensure a consistent level of quality and reliability that raises standards right across the industry.

Our vision

Microtechnix)

At MicroTechniX, we see a future in which the accuracy of lab results is heightened by automated image acquisition systems and intuitive applications. We believe that the greater accuracy, speed and reliability will raise standards, in the life sciences, and in numerous applications in the engineering and manufacturing industries. It will contribute to a general progression and development in scientific methods and protocols.

Let's build it together

We develop our products through co-creation. If your solution doesn't exist yet, we can build it together.

www.microtechnix.com

Contact us





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