



Microtechnix **EMMA**

Microbial Environmental Monitoring System

www.lablogic.com



LabLogic
EXPERIENCE & EXPERTISE

Revolutionizing Microbial QC in GxP facilities

EMMA is revolutionizing the world of microbial environmental monitoring thanks to its high-end components, housed in a modular benchtop format that scales with your needs.

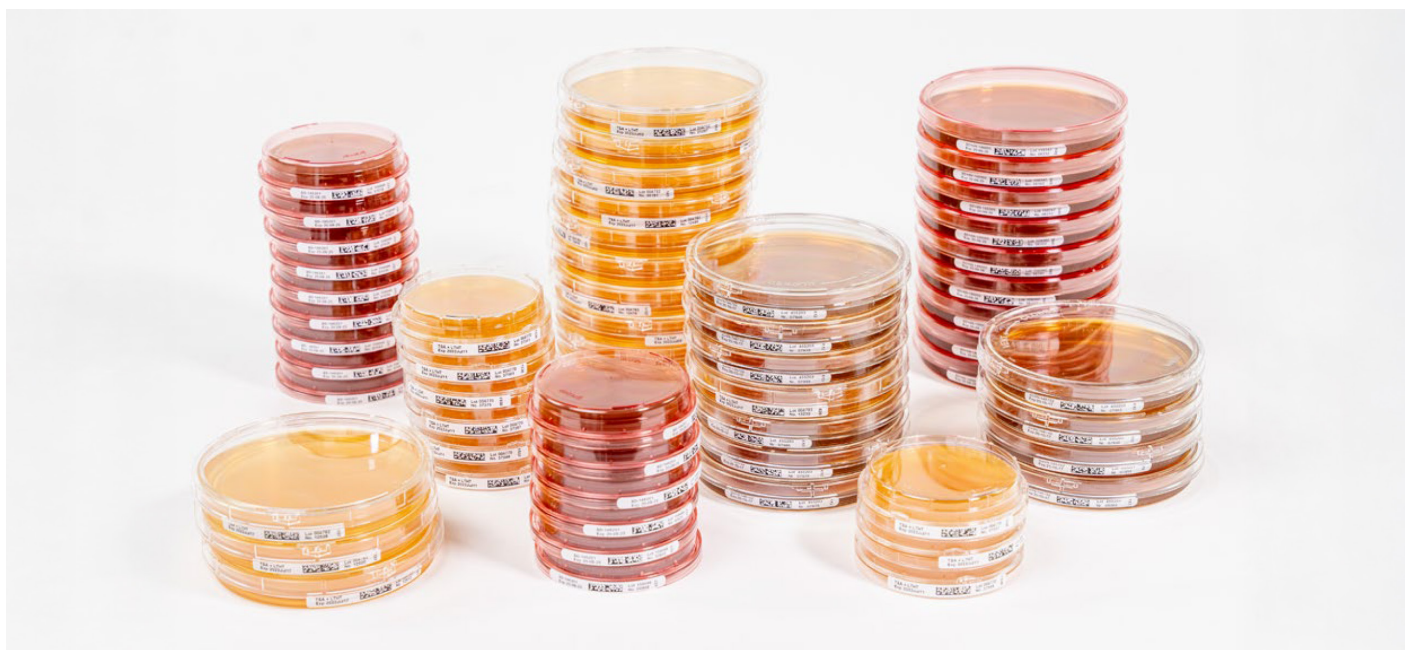
An in-house developed patent-pending optical system guarantees complete acquisition of 100% of the Petri dish surface with the lid on. In combination with an integrated barcode reader and a software platform that is 21 CFR part 11 compliant, EMMA is ready to take your digitization and your data integrity to the next level.

EMMA is available in 3 different configurations:

- EMMA – Focus on Digitization.
- EMMA RL – Automate your digitized workflow.
- EMMA – High throughput automation and digitization.



The EMMA series is designed to digitize and automate your microbial environmental monitoring initiative



It guarantees data integrity straight out of the box, ensuring alignment with present and forthcoming regulatory standards.

- 21CFR part 11 compliant.
- ALCOA+ principles.
- 100% of the Petri dish surface imaged.
- Imaging with lid on.
- Barcode reader integrated.
- Software designed around 4-eyes principle.

Taking variables out of the analysis



The optics

Microtechnix has innovated a novel (patent-pending) optical system for EMMA, guaranteeing the imaging of Petri dish walls with the lid securely in place. Through the integration of a high-resolution camera and a specialized lens, it enables the capture of the entire Petri dish surface, encompassing its walls, while maintaining the lid's position. This method yields high-quality images suitable for subsequent analysis by either an operator or a trained AI model.

Image quality

Patent-pending optical acquisition system ensuring reproducible high-end image quality.

Consistency

An in-house developed RGB calibration ensures consistent and reproducible image quality.

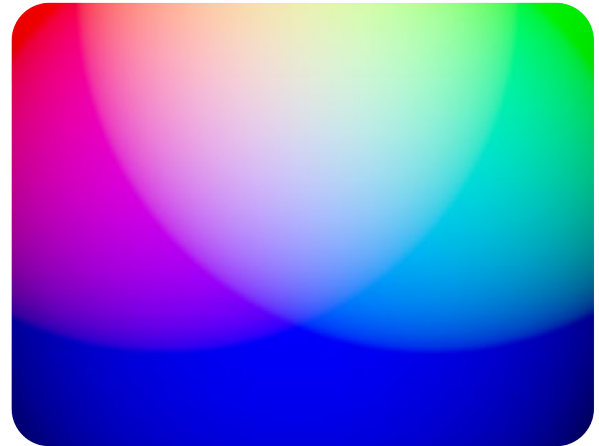
True representation

Covering 100% of the Petri dish surface, including the walls.



RGB calibration

The EMMA series uses mean red, green and blue density values to ensure perfect calibration. The RGB calibration is performed without reference standards or QC calibration tools. A standard calibration file is available to ensure full reproducibility of the imaging parameters used in experiments today and in the future.



Consistency

The RGB calibration parameters apply universally across all Microtechnix systems, ensuring consistent imaging capabilities on every platform. Crossvalidation has never been simpler.

No compromise

High-end optics and camera components were selected to ensure the highest quality images of your Petri dish content, with the lid securely in place.

Seeing the full picture

Our patent-pending optics offer a comprehensive view: capturing 100% of the Petri dish surface without necessitating lid removal. Unlike conventional camera methods such as telecentric or pinhole lenses, which only display the flat bottom of the Petri dish when the lid remains on – leading to significant information loss – Microtechnix has innovated a new optical system. Built upon a hole inspection lens, this system seamlessly captures both the flat bottom and the vertical walls of the Petri dish in a single image, all without lid removal.

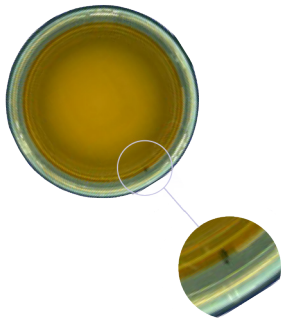
Telecentric optical system

Patent-pending optical acquisition system ensuring reproducible high-end image quality.



Microtechnix proprietary optical system

Image 100% of the Petri dish surface, including the lateral walls.



EMdi system and viewer

The purpose-built, in-house developed EMdi software manages every aspect from planning your run to image acquisition and analysis. Easily set up a routine and have it analyzed by your expert. Ready to upgrade with AI? Our EMdi assistant and automation AI-model upgrades are available to assist 1 operator to achieve the 4-eyes principle.

Audit and validation

All our software is designed with ALCOA+ principles in mind and is fully compliant with 21CFR part 11. This ensures a full audit trail and straight forward validation process.

Compatible with any type of plate

The automated drawer accommodates any type of Petri dish (55 - 90 mm) ensuring compatibility with touch and settle plates.

Integrated barcode reader

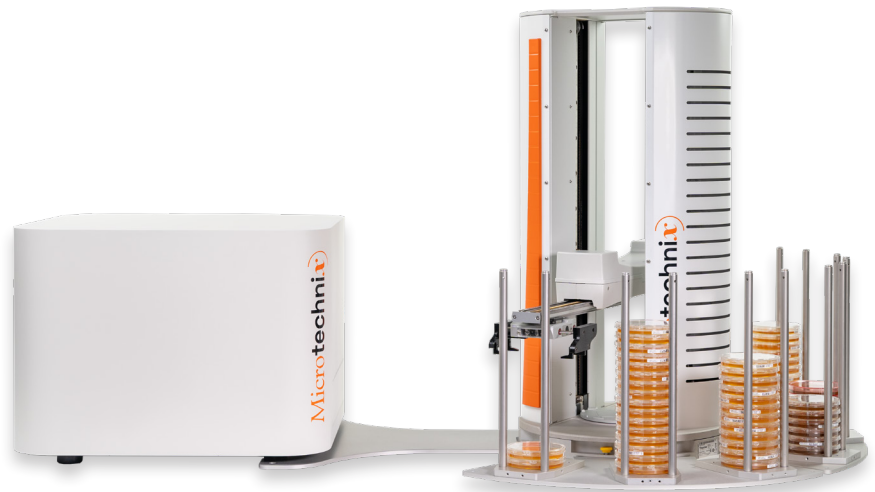
The rotating platform in the drawer ensures accurate identification through barcode scanning on the side of the Petri dish, streamlining the recognition process with the integrated 2D barcode reader within the instrument.

EMMA RL

EMMA RL offers a comprehensive solution for digitizing and automating your Microbiological Environmental Monitoring. This fully integrated and automated system includes a camera, barcode reader, computer and robot, ensuring seamless operation.

Key Features

- Process and analyze up to 120 Petri dishes per hour.
- Perfectly fit to analyze up to 1000 Petri dishes per day.
- Efficiently sort positive Petri dishes in one stack, ready for identification.
- Focus on data integrity to guarantee error-proof sample identification and audit trail compliance (21 CFR part 11 compliant).
- Integrated analysis tools for a streamlined workflow.
- Ability to connect to existing Laboratory Information Management Systems (LIMS).
- Expanded sample capacity, enabling imaging and analysis of up to 200 Petri dishes.
- Upgrade options include vision AI for enhanced automated analysis.

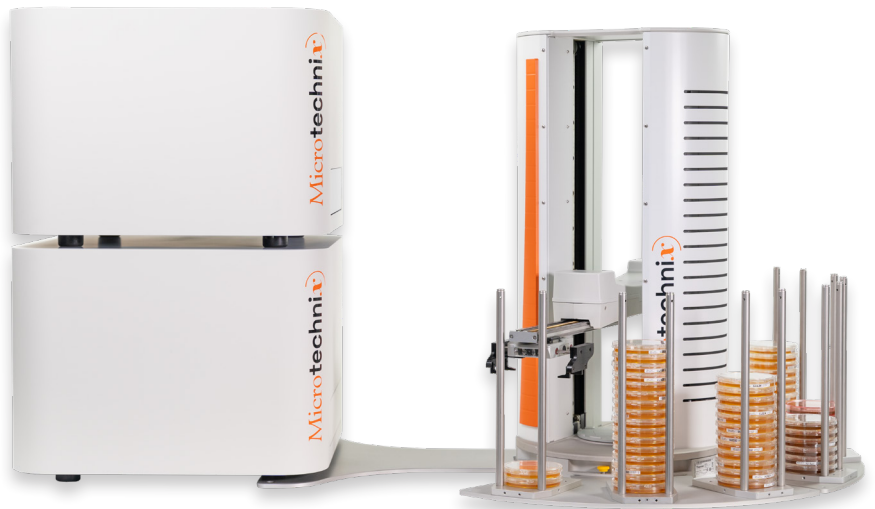


EMMA HT

Meet EMMA, our robust workhorse that can cover high throughput demands. This fully integrated and automated systems comprises of 2 EMMA units and one robot, enabling throughputs of up to 2000 plates per day.

Key Features

- Process and analyze up to 240 Petri dishes per hour.
- Perfectly fit to analyze up to 2000 Petri dishes per day.
- Efficiently sort positive Petri dishes in one stack, ready for identification.
- Focus on data integrity to guarantee error-proof sample identification and audit trail compliance (21 CFR part 11 compliant).
- Integrated analysis tools for a streamlined workflow.
- Ability to connect to existing Laboratory Information Management Systems (LIMS).
- Expanded sample capacity, enabling imaging and analysis of up to 200 Petri dishes per run.
- Upgrade options include vision AI for enhanced automated analysis.



Specifications

	EMMA	EMMA RL	EMMA HT
Sample Capacity	Single Petri dish	Up to 200 Petri dishes	
Throughput	1 plate per minute	2 plates per minute	4 plates per minute
Consumables	Petri dish ø 55-90 mm from any vendor – any type of medium		
Camera	5MP HD camera		
Lens	Patent-pending hole inspection lens		
Footprint	50 x 50 x 42 cm	50 x 50 x 140 cm	50 x 84 x 140 cm
Weight	27 kg	52 kg	79 kg
Screen	22" inch touch screen		
Data Format	.csv, .xls, .pdf, .mp4, .jpeg, .png, .bmp		
Accessories	Robot, base plate and holder with a load capacity up to 25 Petri dishes		
Operation System	Windows 10		
Software	EMdi software suite		
Warranty	1 year warranty		
Voltage and Frequency	100 - 240Vac~ / 50 - 60Hz		
Compliance	21 CFR Part 11, ALCOA+ principles for data integrity		
Temperature	6 - 35°C		
Humidity	75% at 30°C		

Please refer to the Technical Specification Sheet for further information

Service and Support

Users of our systems can benefit from our comprehensive, fully inclusive service and support.

We can give reassurance that if things go wrong or you need expert advice, help is only an e-mail or phone call away.



Validation Services

Our Validation Service enables you to implement and get maximum value from your investments as soon as possible.

We work as a partner with your Quality Manager, System Manager and users to provide a tailored Validation Plan, suited to your needs. Our Validation Specialists who have many years' of experience in GLP system validation, detailed knowledge of our systems, together with other industry standard systems to help you meet company and regulatory requirements.

Training

LabLogic can provide a variety of training courses and workshops to help you get the most out of your instrument and software.

All training is performed by our expert Product and Support Specialists who have many years experience in the development and use of the instruments and software.

Certificates can be provided to complement your internal GLP training records.

USA & Canada

LabLogic Systems, Inc.
3901 Centerview Drive, Suite B
Chantilly, VA 20151, USA

E-mail: solutions@lablogic.com

Tel: +1-703-429-4209

www.lablogic.com

Europe & Worldwide

LabLogic Systems Limited
Innovation House, 6 Europa View
Sheffield, S9 1XH, UK

E-mail: solutions@lablogic.com

Tel: +44 (0)114 266 7267

www.lablogic.com



INVESTORS IN PEOPLE
We invest in people Gold