

# BioVendor Instruments

*Plate Imager with Automated Colony Counting & Image Analysis module*



- CLINICAL MICROBIOLOGY
- FOOD AND WATER TESTING
- RESEARCH & DEVELOPMENT



## COLONY COUNTING

The BioVendor Instruments' product line for Colony Counting is designed and focused to optimise colony counting and analysis procedures. With its intuitive and user-friendly software, the Plate Imager with automated colony counting & image analysis module is designed to analyse Petri dishes up to 90 mm, and can count over 1000 colonies per plate.



## APPLICATIONS

- › Disinfection efficiency
- › Environmental monitoring
- › Fluid contamination
- › Hygiene studies
- › Microbial limits testing
- › Sterilization



## PLATE IMAGER

- › Small to medium laboratories, Dish Archiving & Colony Counting, Batch Processing
- › Visible LED lighting system from top, bottom, and both sides
- › UV LED lighting system for fluorescent bacteria analysis
- › CMOS colour camera with high resolution
- › USB 2.0 connection, Barcode Reader



## SCANNER

- › Primarily designed for dish archiving in small laboratories
- › Fast scanning (up to 6 Petri dishes at one time)
- › Scanner resolution 300 dpi, max. 1200 dpi
- › Visible (LED/Laser) reflected lighting
- › USB 2.0 connection, Barcode Reader

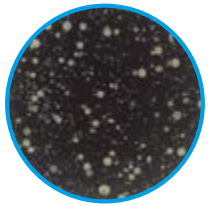


## SOFTWARE

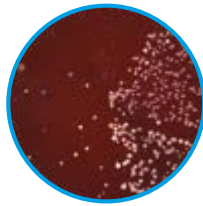
- › Dish archiving
- › Batch processing
- › Instrument diagnostic module
- › Fast and automated colony counting
- › Statistics, protocols, reporting & exporting

# Examples & Features

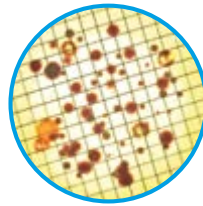
## EXAMPLES



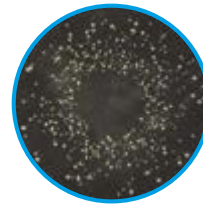
Pour plate



Spread plate



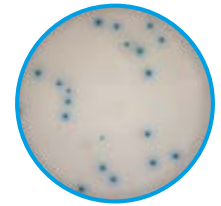
Membrane filtration



Spiral plate



Fluorescent bacteria

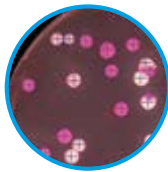


Chromogenic media

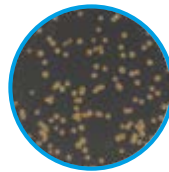
## FEATURES



Colony size setting



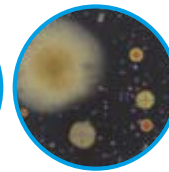
Agar & microbe colour adaptation



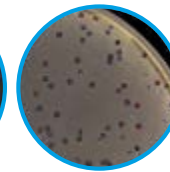
Touching colonies separation



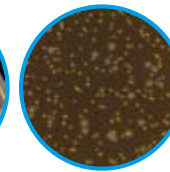
Region selection / exclusion



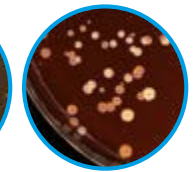
Filtering of impurities (bubbles, moulds etc.)



Manual colony control



Size cluster analysis



Colour cluster analysis

# Research & Development



## We are our own customers

Research and development of the automated colony counting & image analysing system is based on requirements identified in our own microbiological laboratory. The needs of laboratory employees are carefully analysed and transformed into software development requirements. At the end of the implementation process, the system is deployed in our laboratory for testing and validation by professional microbiologists.



## Custom-tailored system, OEM

We are able to better meet the unique characteristics and needs of our customers' laboratories. Thanks to the modularity and flexibility of our system, we are able to produce fully customised solutions for every laboratory, and every customer. Do you need to work with other types of information, other software features, or produce customised reports? We are not afraid of new, challenging and complex tasks.



## Validation and testing process

Our team of researchers, analysts, and developers, in cooperation with specialists from microbiological laboratories, have created a training database of millions of microbial colonies. The database is constantly growing and is properly annotated, allowing trusted validation of image analysis.



## Our algorithms are always up to date

We are committed to ensuring the seamless integration of our products into your laboratory. Engineers working in our software laboratory, in cooperation with University Centres of Excellence, are continually improving the software to improve user ergonomics, automated image processing, and analysis. We provide customer care from the moment of delivery and initial training, through to its final recycling, along with maintenance and updates throughout the lifetime of the product.

## TECHNICAL SPECIFICATIONS

	Archiving, Analysis	Archiving
Type	Plate Imager	Scanner
Camera sensor	CMOS	Linear CCD
Camera resolution	5 Mpx (Up to 13 Mpx)	300 dpi (Up to 1200 dpi)
Lighting technology	White LED, UV LED	White LED
Lighting system	Reflected, Transmitted, Combination	Reflected
Number of dishes	1 dish	1 to 6 dish
Diameter of dishes	up to 90 mm	
Scanning time	< 1 s	< 4 s
Counting	Automated with manual control	Not in standard configuration
Data export	PDF, DOCX, XLSX	
PC connection	USB 2.0 / USB 3.0 compatible	
Operating temperature	+5 to +40 °C	
Power input	110-230 V, 50/60 Hz	
Power consumption	40 W	18 W
Dimensions	250 x 350 x 400 mm	491 x 291 x 102 mm
Weight	17 kg	4 kg
<b>PC All-in-One</b>	<b>Minimal System Requirements</b>	
CPU	Intel Pentium/Core i3/Core i5	
RAM	DDR3, 4 - 8 GB	
HDD	500 - 1000 GB	
USB	3x USB 2.0; 2 x USB 3.0	
Display	23", 1920 x 1080 (Touch)	
Operating system	Windows 7 and higher	
Power consumption	150 W	
Dimensions	564 x 444 x 53 mm	
Weight	6.7 kg	
<b>High quality photo printer</b>	<b>On demand</b>	
<b>Handheld barcode reader</b>	<b>On demand</b>	

EN\_v002\_03\_2016



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