

Automatic colony counters & inhibition zone readers



# interscience



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# Our quality for your lab

- Designer and manufacturer for microbiological analyses
- Made in France
- R&D leadership with innovative & reliable products
- Worldwide distribution network, immediate delivery



# High quality analyses, full traceability

#### Scan<sup>®</sup> 300, Scan<sup>®</sup> 500 & Scan<sup>®</sup> 1200

High technology automatic colony counters

With a digital camera and high technology software, they can be linked to a PC via a USB connection. They count all colonies on a Petri dish in less than 1 second and provide a complete, fast, accurate and traceable reading of the result.

## Bacterial enumeration

- Food analyses
- Total flora analyses
- Aerobic & anaerobic bacterial enumeration, yeasts, lactobacillus...
- Pathogenic bacteria research
- Environmental research
- Pharmaceutical analyses
- Medical analyses
- Cosmetics analyses

## Inhibition zones

- Pharmaceutical industry, medical research & hospitals (antibiograms, resistance tests to pathogenic microbes, medical diagnoses...)
- Food industry (Tests on lactic ferments & for dairy ingredients industry...)



# **Scan**<sup>®</sup>

- Automatic colony counters: No settings
- Inhibition zone readers\*
- Data traceability and full report



#### High performance

- > Count colonies of numerous media
- > Read chromogenic Petri dishes<sup>(1)</sup>:
- Colored differentiation of colonies
- (up to 7 different colors on the same dish)
- > Inhibition zone measurement



#### Live image

- Fits any type of dish: automatic adjustment of contrast and lighting
- > High-definition color image
- > Each colony is marked with a cross
- > Powerful zoom: up to x28



 Sample N*	Count	Dilution	
e coli	174	1	2
e coli	353	1	5
SPIRAL	47	1/1000	9.
PETRIFILM	89	1	8
RIDA COUNT	179	1	1.
Filtering Membrane	111	1	1.

#### **Instant results**

- > Up to 1000 colonies detected in 1 second
- Counts 30 dishes in 5 minutes (in real condition with presetting)
- > Reproducible and standardized results
- > Scan® results: instant and automatic





#### Easy-to-use

- Counting in 1 click <
- All functions in 1 single window <
- Custom parameters: day, users, project... <



#### **Dark Field technology**

- Display of every colony <
- Optimized lighting & contrast <
- Long lasting LED lighting <
  - 6 lighting combinations <



### **Traceability & reporting**

Automatic archiving and printing of data: < pictures, comments & results Export to EXCEL<sup>™</sup>, PDF, JPEG, BMP < Barcode reader < Connection to LIMS network <





Scan 1200°

can 500°



(2) Free update of the software during warranty period (3) After registration of the warranty form

# Efficiency & time saving

#### Instant results

Thanks to the live image display of the Petri dish on your computer, count more than 1000 CFU/s on all media. Each counted colony is marked with a cross and the result is automatically saved.



#### No settings

Choose your pre-set parameters for Petri dishes:



#### Also available on Scan® 1200:

- MC-Media Pads<sup>™</sup>: AC, CC, EC/CC, SA
- Petrifilm<sup>™</sup>: AC, ETB, CC, EC/CC, EC
- Compact Dry™: TC, CF, EC, ETB

#### High-performance colony counters

Scan® works for every kind of colony. The minimum size is 0.05 mm for Scan® 1200 and 0.1 mm for Scan® 300 and Scan<sup>®</sup> 500. Scan<sup>®</sup> colony counter automatically separates confluent colonies, allows you to create polygonal exclusion areas and ignores agar flaws and air bubbles. You can also add or remove colonies manually. Every change is automatically saved in your report.



Scan<sup>®</sup> read all the colonies, even the smallest



Automatic separation of confluent colonies



Automatic elimination of counting grids



Cross on each counted colony



Polygonal exclusion areas



Automated software with manual control

#### **Color detection** & chromogenic media

Scan® 500 and Scan® 1200 can read chromogenic agar and differentiate colonies by color: up to 7 different colors on the same Petri dish. Color selection can be made directly from the color of the bacteria and a cursor allows you to set the sensitivity.

Chromogenic media reading allows the detection of Salmonella on XLD media and E.Coli on TBX media, for example.



\* on Scan<sup>®</sup> 500 & Scan<sup>®</sup> 1200

# Scan<sup>®</sup>: 3 models adapted to your needs



### Scan<sup>®</sup> 300 Essential

#### Ref 436 300

- 6 combinations of lighting and backgrounds
- Motorized background color
- · Brightness, contrast and sensitivity are automatically optimized by the software
- Long lasting LED lighting
- CMOS color camera. zoom x28, M12 lens
- Minimum size of detected colony: 0.1 mm



### Scan<sup>®</sup> 500 Efficient

#### Ref 436 000

- 6 combinations of lighting and backgrounds
- Motorized background color
- Brightness, contrast and sensitivity are automatically optimized by the software
- Long lasting LED lighting
- CMOS color camera, zoom x28, M12 lens
- Minimum size of detected colony: 0.1 mm
- Detects and counts up to 7 colors on the same dish
- Inhibition zone reading with EUCAST, CA-SFM, CLSI and editable database

#### Count these supports





Chromogenic Antibiogramm Petri dishes



### **Scan® 1200 High-Resolution**

#### Ref 437 000

- 6 combinations of lighting and backgrounds
- Motorized background color
- Brightness, contrast and sensitivity are automatically optimized by the software
- Long lasting LED lighting
- HD color CCD camera, zoom x28, HD japanese lens
- Minimum size of detected colony: 0.05 mm
- Detects and counts up to 7 colors on the same dish
- Inhibition zone reading with EUCAST, CA-SFM, CLSI and editable database
- Petrifilm<sup>™</sup>, Compact Dry<sup>™</sup>, MC-Media Pads<sup>™</sup> and filtration membrane reading

#### Count these supports



Surface/pour Spiral® plating plating



Chromogenic Antibiogramm Petri dishes





Dry™



MC-Media Pads™

membrane

Count these supports



# Inhibition zone from paper discs, agar wells & peni cylinders

#### Performance and flexibility

**Scan® 500** and **Scan® 1200** allow efficient work flow because you can create and edit a list of antibiotics, useful for routine analysis.

Measured by **Scan®**, inhibition zones guarantee repeatability and reproducibility of analysis and diagnosis reliability.

- Rapid detection: up to 8 antibiotic sensitivities in 1 click.
- Paper discs, agar wells and peni cylinders may be manually added or deleted. Inhibition zones may be manually resized.



The result of sensitivity in contact with the antibiotic is fast and visualization of results is clear:

- > Red (resistant)
- > Yellow (intermediate)
- > Green (susceptible)



Precision of inhibition zone radius measurement from paper discs : 0.3 mm



### Precision of inhibition zone radius measurement from agar wells : 0.3 mm

#### **Medical analysis**

Inhibition zone measurement allows you to test the efficiency of antibiotics on micro-organisms to accelerate the diagnosis in order to choose precisely an appropriate antibiotic treatment for a patient. **Scan®** has a built-in antibiotic database from the **French Society** of Microbiology (CA-SFM), the European Committee on Antimicrobial Susceptibility Testing (EUCAST) and the Clinical and Laboratory Standards Institute (CLSI) which determines the sensitivity of the bacteria to the antibiotic. This database is fully editable.

#### Pharmaceutical analysis

In the pharmaceutical industry, **Scan**<sup>®</sup> allows you to test the quality of an antibiotic during its manufacturing process by measuring the inhibition zones. To evaluate the action of an antibiotic, antibiotic diffusion from paper disc, agar well or peni cylinder is supported.



\* on Scan<sup>®</sup> 500 & Scan<sup>®</sup> 1200

# Comfort of use

#### > High definition live image

This feature enables total control of colony counting.

#### **Optimum visualization**

Enjoy comfortable viewing of the colonies with the unequalled **Dark Field technology**, high definition live image and with the automatic optimization of the image (lighting, contrast and sensitivity). You can also check key areas thanks to the digital zoom.







Scan<sup>®</sup> automatically optimizes contrast, luminosity and sensitivity



Digital zoom with the mouse wheel (up to x28)



#### Easy-to-use

All **Scan**<sup>®</sup> functions are in **one single window** and colonies are counted in one click.

The **Scan**<sup>®</sup> easy commands (visualization, settings and results) allow quick access to both ongoing and archived work sessions.

**Scan**<sup>®</sup> software is available in **7 languages** (English, French, Chinese, Russian, Japanese, Spanish and German) and is updated regularly. The intuitive use of **Scan**<sup>®</sup> **does not require any special training**.



# Fast communication, total traceability

#### **Results harmonization**

Using the **Scan**<sup>®</sup> allows more reliable analyses and harmonizes the results within a team.

You can save as many settings as you wish and customize the settings according to the type of dishes and agar you use.

The automatic archiving of data, photos, comments and results ensures total traceability.

#### **Print your results**

You can export your results to your PC, archive it in Excel<sup>™</sup>, PDF, SCA or BIO format. You can also export pictures from the camera in JPEG, PNG and BMP format.





### **Reproducibility of results**

Automatic counting is a guarantee of regularity and standardization of analyses, which is the key to ensure accurate and reliable results. Reproducibility of results is guaranteed whatever the day, conditions and user.

A scientific study has proved up to 98% precision for Scan® colony counters.



different users by manual counting of colonies

Study made on Bacillus cereus, Escherichia coli and Lactobacillus casei

#### Internal traceability

Thanks to the LIMS connection and the barcode reader, photos of counted plates are saved and traceable. The images are accessible and recountable at any time.











automatic counting

Barcode

Archiving

LIMS connection dataLink™ (see p. 12)

#### Secure your sessions

Sessions are secured with a security code (one per operator) and the impossibility to alter each saved counting. Scan® use allows the compliance with 21 CFR part 11: system securization, operational controls and documentation management.



#### > External traceability

Scan® software provides numerous possibilities to easily and quickly export your results.



Work sessions saving



PDF export



JPEG, PNG & BMP formats export



Export results to Excel<sup>™</sup> to ensure traceability



Print report from Scan®

# Plate & Count System<sup>®</sup> with dataLink<sup>™</sup>



**Plate & Count System<sup>®</sup>** with data**Link<sup>™</sup>** enables automatic plating and colony counting with full traceability!

- **INCREDIBLE SAVINGS:** Save up to 75% in time, consumables and bench space
- **FAST:** Full plating cycle in 25 seconds and counting in 1 click. No manual data input.
- **RELIABLE:** 98% repeatable and reproducible results
- **TOTAL TRACEABILITY WITH** dataLink<sup>™</sup>: Automatic data saving and reporting

Plate & Count System<sup>®</sup> with dataLink<sup>™</sup> includes:

- easySpiral®: Automatic Spiral® platers
- Scan<sup>®</sup>: Automatic colony counters
- dataLink™: Traceability system

### **HOW DOES IT WORK?**

#### **STEP 1**



**STEP 2** 



Plating with easy**Spiral Pro®** or easy**Spiral** Dilute®.The easy**Spiral®** supervision software collects data from the plater.

Label printing with the Datamatrix code. Stick the label on the plated Petri dish before incubation.

**STEP 3** 



\* Please check LIMS compatibility

... Incubation 24-72 h

After incubation, scan the Datamatrix code. The **Scan®** colony counter is parametered automatically with the Datamatrix data. Click on "VALIDATE". Export the data.

## PLATE AND COUNT YOUR PETRI DISHES

## From 30 to 1x10<sup>12</sup> cfu/mL on one single petri dish

easySpiral<sup>®</sup> automatically plates a sample in 8 seconds: from 30 to 1x10<sup>12</sup> CFU/mL on a single Petri dish without prior sample dilution. Once the sample is plated and incubated, it is ready to be counted by Scan<sup>®</sup> automatic colony counters. Results are immediately displayed and saved.

### Up to 75% savings

easySpiral<sup>®</sup> and Scan<sup>®</sup> guarantee the regularity and standardization of the analyses, save time, consumables and bench space of up to 75 %.





# Technical specifications

	Scan <sup>®</sup> 300	Scan <sup>®</sup> 500	<b>Scan® 1200</b>		
Reference	436 300	436 000	437 000		
Camera	CMOS color camera		HD CCD color camera		
Lens	M12 lens		HD japanese lens		
Digital zoom					
Resolution	1 mega	1.2 megapixels			
Resolution Counting time	Up to 1000 colonies per second				
Minimum size of colonies	0.1 m	0.05 mm			
Lighting technology					
Lighting system	Automatic 6 combinations, top and/or bottom light white or black background				
Counting Automatic, with manual control					
Results / data export	Scan <sup>®</sup> recountable file, PDF report, JPEG, PNG, BMP, Excel™				
LIMS connection	✓	✓	✓		
USB connection	✓	✓	✓		
Petri dishes	✓ (55-90 mm)	✓ (55-90 mm)	✓ (55-90 mm)		
Spiral <sup>®</sup> plating	✓	✓	✓		
Color detection	- 7 colors on the same Petri dish + 1 color to exclude				
Color detection Chromogenic medium	-	✓	V		
Inhibition zones	-	✓	✓		
Petrifilm™	-	-	✓		
MC-Media Pads™	-	-	✓		
Compact Dry™	-	-	✓		
Filtration membrane	-	-	✓		
Languages	English, French, Japanese, Chinese, Russian, Spanish, German				
Traceability	21 CFR Part 11				
Dimensions (w x d x h)	28.5 x 26.5 x 29 cm		28.5 x 26.5 x 37.5 cm		
Weight	8.4 kg		9.4 kg		
Body Computer connection	Stainless steel				
Computer connection	USB				
Power	100-240 V~ 50/60 Hz				
Operating systems	Windows <sup>™</sup> : Seven <sup>™</sup> (Service Pack 1) or 8 or 10				
Processor	(Quad-core recommended) Intel i3 or i5 or i7 or AMD FX 6000 or superior, 2.4 Ghz or superior				
RAM	4 Go minimum (8 Go recommended)				
Processor RAM Graphic card	AMD or NVIDIA (chipsets are not recommended)				
Equipment	USB 2.0 slot				
Screen		1280 X 1024 pixels and more			

Delivered with : Scan® software, power cord, 2\* or 3 validation plates, user guide, quick user guide. (\*only on Scan® 300)







Product made for INTERSCIENCE by Interlab, an ISO 9001 certified company

#### Warranty

3 years Warranty / 3 years free Software update (after registration of the warranty form)

PC requirements are subject to change. Please check our website www.interscience.com for current updates and additional informations.

# Scan<sup>®</sup> accessories













data**Link™** Ref.: 410 100

\* Only on Scan® 1200

Ref.: 522 000

Barcode reader

Adaptor for Petrifilm™\* Ref.: 437 002

Adaptor for . MC-Media Pads™\* Ref.: 437 001

Adaptor for Compact Dry<sup>™</sup>\* Ref. : 437 004

Adaptor for Petri dish (55 mm) Ref. : 436 005

#### Discover our complete range for microbiology Scan<sup>®</sup> 4000 Automatic colony counting & inhibition zone reading data**Link**™ **BagTools**<sup>®</sup> Traceability system Handle the sample **BagPipet**<sup>®</sup> easy**Spiral** Dilute<sup>®</sup> Pipet the filtered sample Automatic diluting & plating **BagMixer**<sup>®</sup> Homogenize the sample FlexiPump<sup>®</sup> Liquid dispensing Dilu**Flow**® Dilute the sample Result PLATE & COUNT SYSTEM **BagFilter**<sup>®</sup> Sample with a filter bag BASSYSTEM sample preparation Sample www.interscience.com



#### On our website, find and download:

- Latest information on our products
- Demonstration photos and videos



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