Scan® 4000

Automatic colony counter
Inhibition zone reader

unbeatable
image quality

interscience

interscience quality

- Designer and manufacturer since 40 years
- From sample prep' to microbiological analysis: a complete range of products
- Present in more than 130 countries
- Designed and made in France

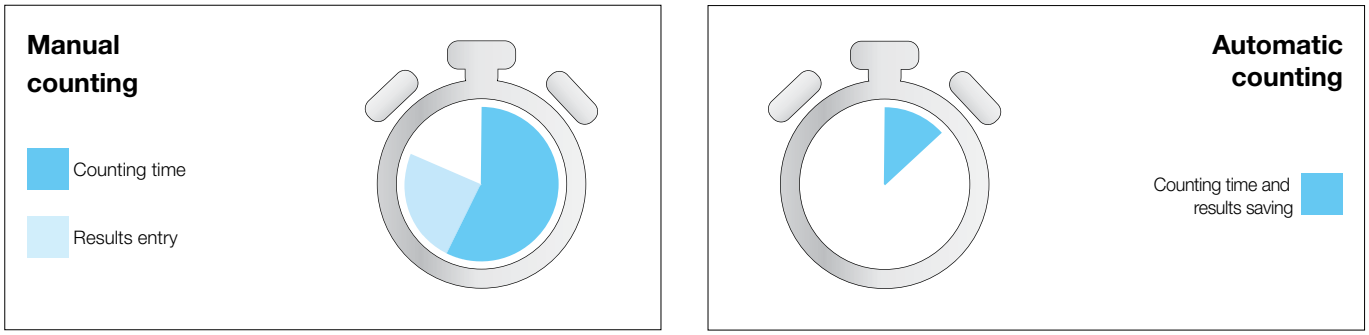
Scan® 4000

Scan® 4000 is an ultra HD automatic colony counter and inhibition zone reader for high resolution color reading of colonies and inhibition zones.

Adapted to all sizes of Petri dishes and all media, its lighting system guarantees a great user comfort, high accuracy and excellent reproducibility.

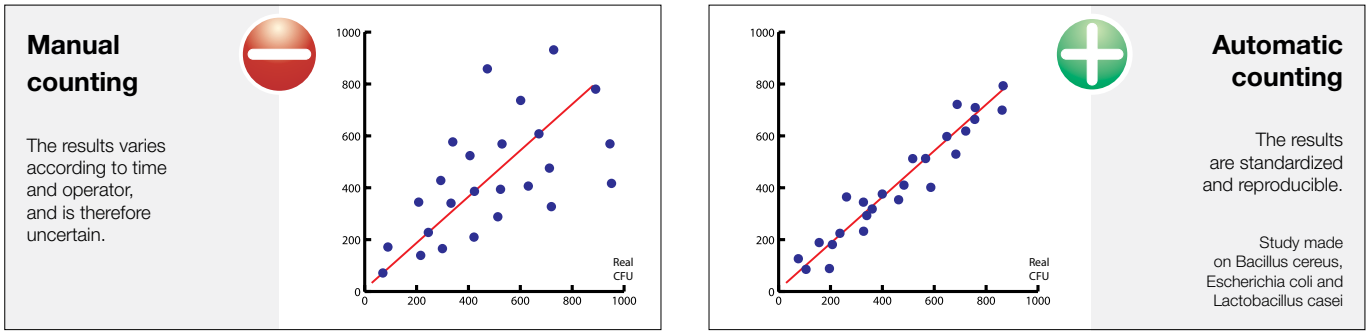
Why use a colony counter?

1 Productivity



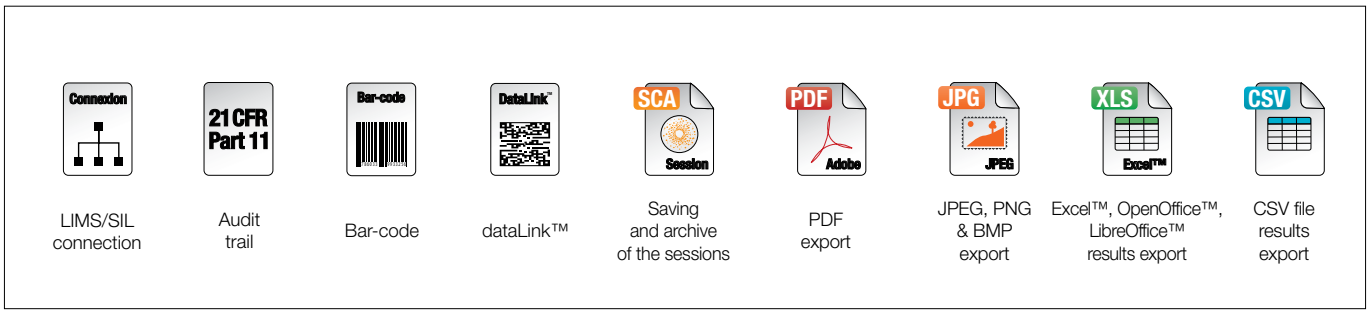
If you count at least 50 Petri dishes per day, with the Scan® 4000 you can reduce the reading time up to 80% as it counts up to **1000 colonies in 1 second!**

2 Accuracy and repeatability



The manual counting of colonies on Petri dishes is long and painstaking and may vary in the beginning and the end of a single day, according to the operator. The Scan® 4000 counts with **up to 98% accuracy** in a **constant and repeatable way**.

3 Traceability



Scan® 4000 offers multiple ways of data export to save time and **increase the security and the quality of the analyses**.

Usually, after counting the dishes are thrown away and checking is thus not possible in case of a disagreement. With Scan® 4000, if you have any doubts, you still have the pdf and the photo of the dish before/after counting to **check again the result** and hand it to your customer or supervisor.

Technology at its best for your analyses

Ultra High resolution camera

Ultra HD 5 megapixels camera
Digital zoom x 69
Live camera image

Total traceability

Bidirectional connectivity

	Scan® 300	Scan® 500	Scan® 1200	Scan® 4000
LED lighting	✓	✓	✓	✓
HD camera (megapixel)	✓	✓	✓	✓
Colony counting on pour, surface, spiral® and circle mode plated dishes	✓	✓	✓	✓
Colony counting on chromogenic agar	-	✓	✓	✓
Inhibition zone reading	-	✓	✓	✓
Colony counting on Petrifilm™, filtration membranes…	-	-	✓	✓
High sensitivity sensor	-	-	✓	✓
Ultra HD camera (5 megapixels)	-	-	-	✓
Round Petri dishes up to ø 150 mm Square Petri dishes 120 mm	-	-	-	✓
White LED Dome lighting	-	-	-	✓

Scan®4000 video
Scan me!

Beam Splitter

Avoids reflections of the camera on the Petri dish

White LED Dome

White LED diffusing lighting without reflections or shadows

Largest reading range

Round ø 55 to 150 mm Petri dishes
120 mm square Petri dishes

Quick lighting system

Black/white background with no moving parts

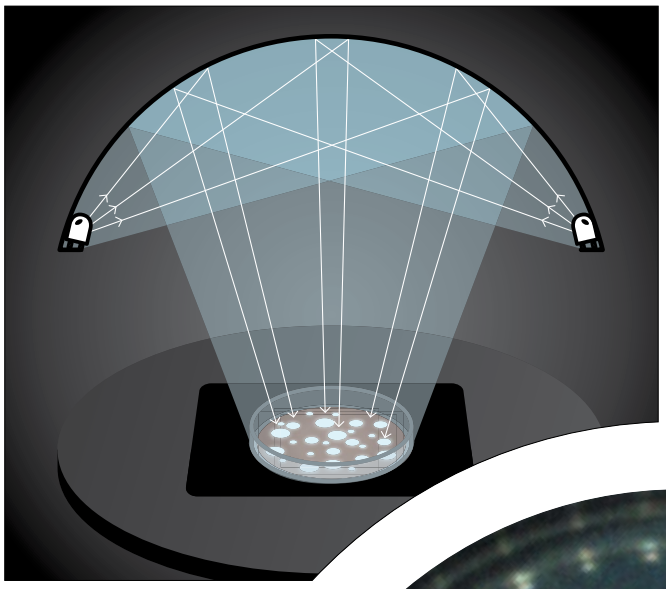
Robust

304L stainless steel hardware
Shock-proof glass

IN CONFORMITY WITH

ISO 7218 | AOAC 977.27 | 21 CFR Part 11 | EUCAST European Committee on Antimicrobial Susceptibility Testing — European Society of Clinical Microbiology and Infectious Diseases | SFM | Clinical and Laboratory Standards Institute

Innovative features



White LED Dome: reflection and shadow free

Petri dishes are difficult to lighten as they are transparent and reflective. Heterogeneous lighting creates artefacts on the edges of the agar and on the sides of the dish. These artefacts may be counted as colonies and can ruin an accurate counting.

We have designed a white diffusing dome for 360° lighting without reflections or shadows.

The lighting is spread evenly everywhere and allows you to count the colonies on the entire surface.

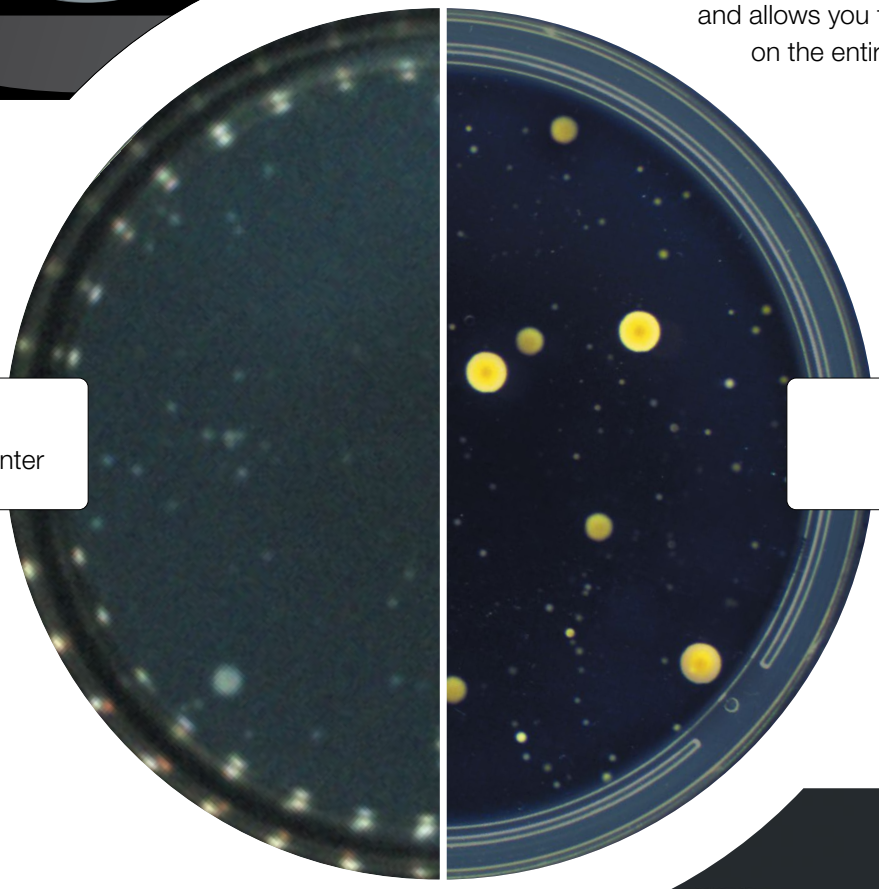
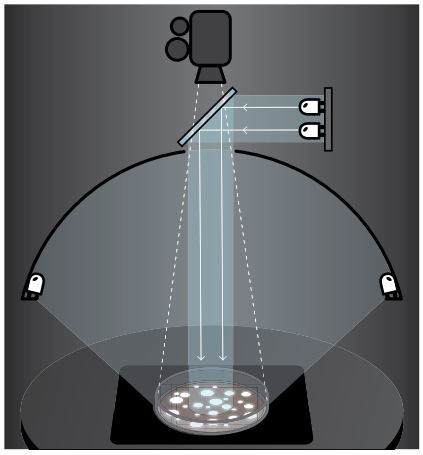


Image quality with a classic counter

Scan® 4000 image quality

Ultra High Resolution camera

Equipped with a German 5 megapixels camera and a Japanese lens, the Scan® 4000 offers the best image quality of the interscience range. See details you would not see with your bare eye!



Beam splitter

Even with a white diffusing dome there may be reflections of the camera lens on the Petri dish.

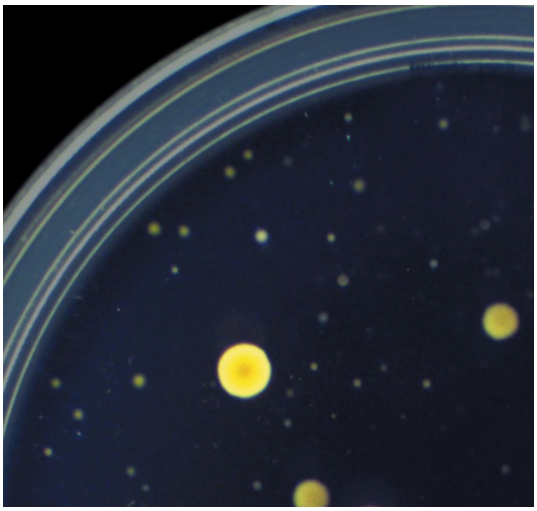
We have designed a special mirror with its own lighting enabling to compensate this reflection for a lighting without a single reflection.

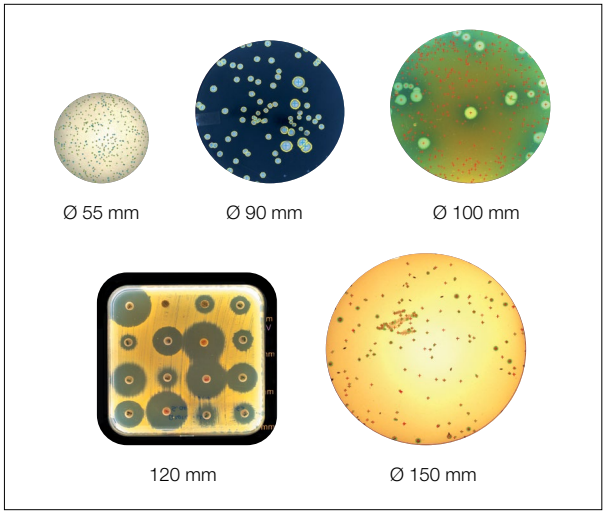
Reading on 100% of the surface of the Petri dish

The new design of the bottom lighting includes a glass panel to place the samples. Place your dish anywhere on the surface, the Scan® 4000 detects it and zooms automatically. The shock-proof glass is a real user comfort and makes it a long-lasting lab companion!

You can then count on 100% of the surface of the dish even colonies on the edge of the dish.

Moreover the black/white background is designed without moving parts to improve the reliability and the speed of changing the background color.





The largest reading range on the market

The Scan® 4000 enables to read the Petri dishes up to 150 mm diameter and on 120 mm square Petri dishes which makes it the colony counter with the largest reading range possibilities.

Integrated 21CFR Part 11

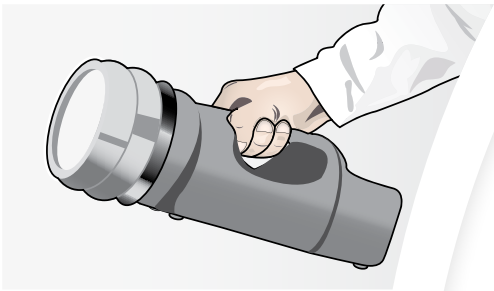
The Scan® software is in compliance with the FDA guidelines, as electronic signatures, audit trail and securing of the results. The management of the operators is integrated in the software for greater security and user-friendliness. The supervisor can manage the accounts and passwords automatically without having to refer to a system administrator!

21 CFR
Part 11

Applications

Pharmaceutical industries

Sterile room monitoring



The Scan® 4000 allows the reading and recording of air sample dishes for bacteriological control of sterile rooms.

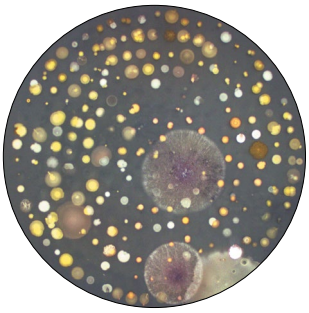
With Scan® 4000 you have complete traceability on your air quality. Your auditors will be happy!

The integrated management in the 21CFR part 11 V8 software enables more security and flexibility.

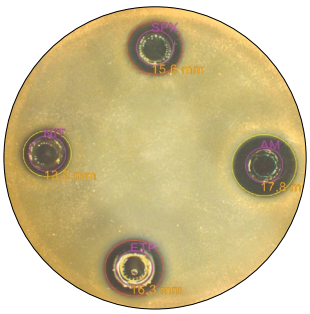
Antibiotics efficiency measurement

During the manufacturing of antibiotics, it is necessary to compare the efficiency of the antibiotic with a reference.

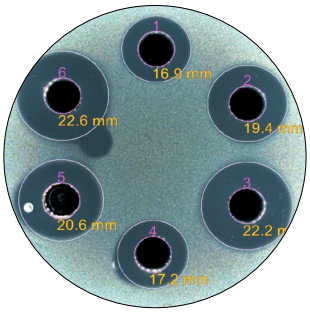
Scan® 4000 enables reading of inhibition zones, should they be with peni-cylinders, in place or after removal, with agar wells or with paper disks.



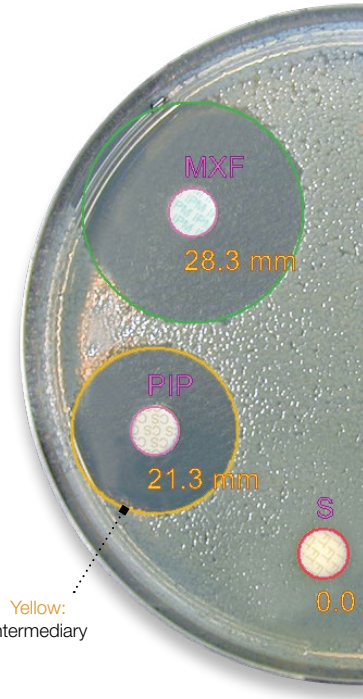
Air analysis
on TSA



Removed peni-cylinders
on TSA agar

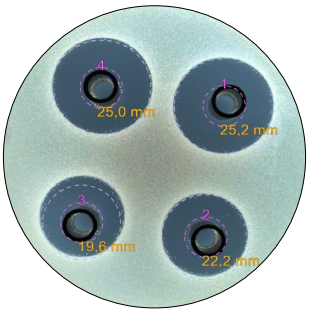


Wells
on TSA agar

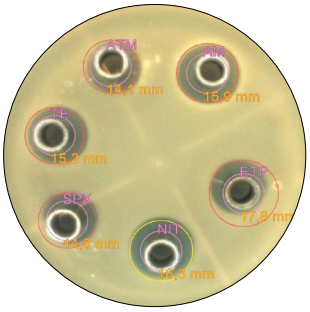


Yellow:
intermediary

Round Petri dish ø 90 mm



Peni-cylinders
on TSA agar



Peni-cylinders
on TSA agar

Medical and veterinary industries

For bacteriological labs, hospitals and clinics, the use of the Scan® 4000 allows you to read up to 12 paper disks on round dishes and 16 paper disks on square dishes.

You can memorize your masks and analyze your dish in a few seconds.

The result of the sensitivity in contact with the antibiotic is quick and the visualization of the results is simple:

- Red: resistant
- Yellow: intermediate
- Green: sensitive

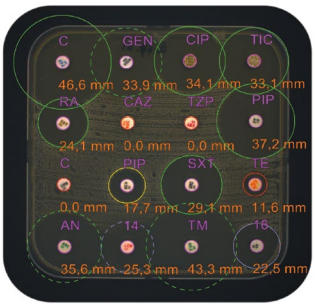
The color image of the Petri dish is automatically saved in HD quality.

Included database
+ customizable database:

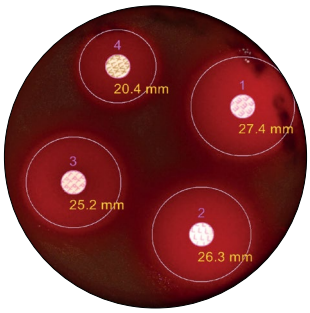
EUCAST EUROPEAN COMMITTEE ON ANTIMICROBIAL SUSCEPTIBILITY TESTING
European Society of Clinical Microbiology and Infectious Diseases

SFM Société Française de Microbiologie

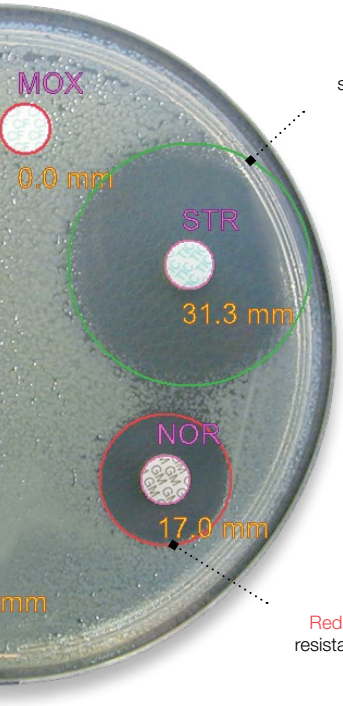
CLINICAL AND LABORATORY STANDARDS INSTITUTE



Square Petri dish ø 120 mm

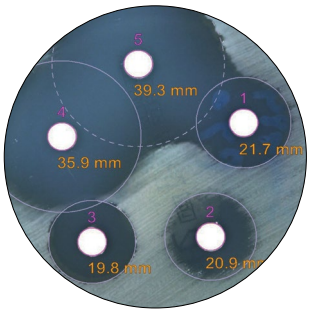


Paper disks
on blood agar

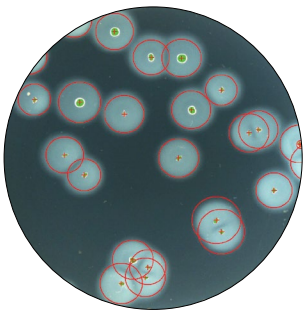


Green:
sensitive

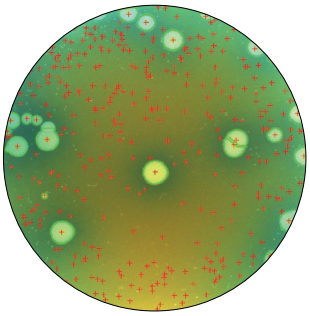
Red:
resistant



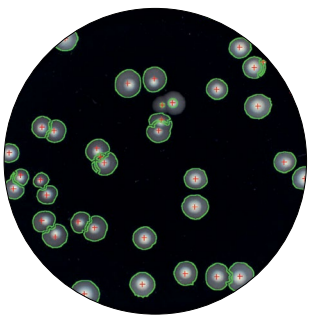
Paper disks
on Mueller Hinton agar



Staphylococcus
on Baird Parker agar



Pseudomonas
on Hektoen agar



Legionella
on GVPC agar

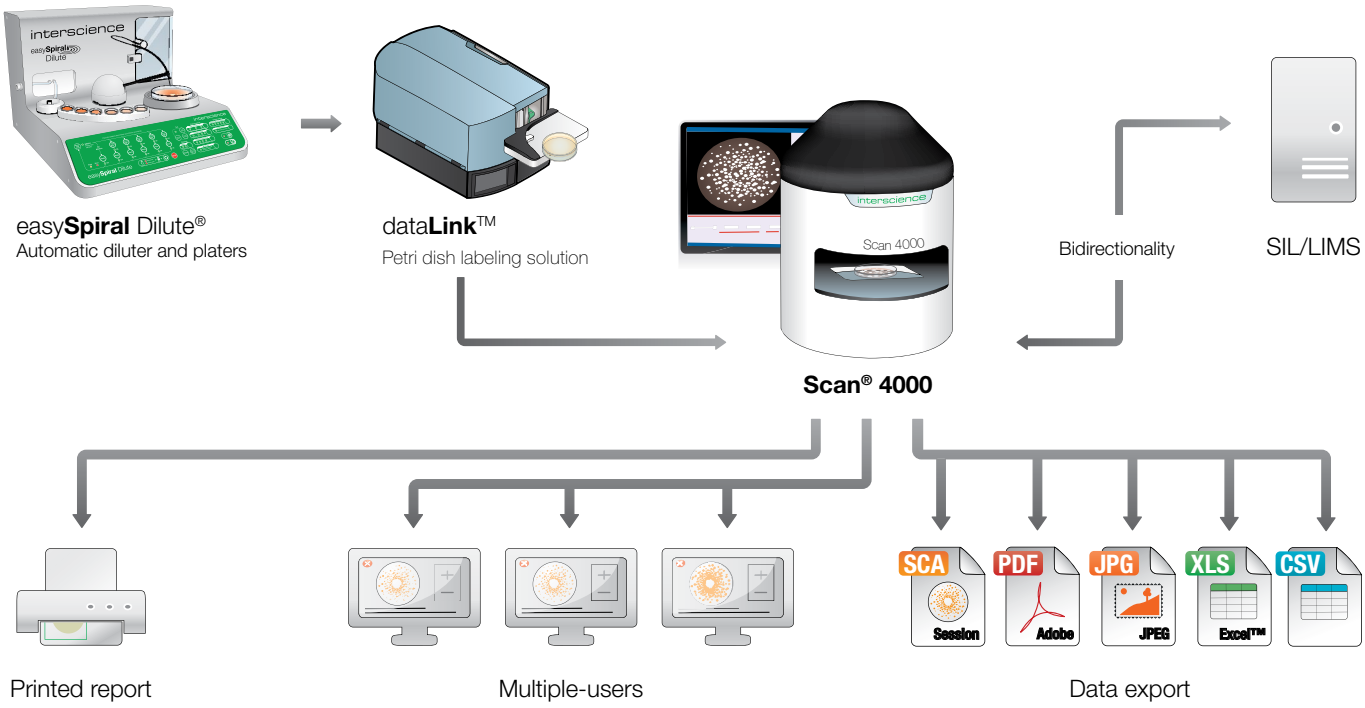
Food industries

For food industries the step of counting colonies in the process of microbiological analysis is important.

Scan® 4000 counts colonies with export of the results and traceability guarantees on all media used in labs.

The results are instant on Petri dishes (55-150 mm), Spiral® plated dishes, Petrifilm™, MC-Media Pads™, Compact Dry™, EasyPlate™ and filtration membranes.

Traceability



Results print

Export your results to your PC, or save them in CSV, Excel™, OpenOffice™, PDF, SCA, BIO. You can export the images in JPEG, PNG and BMP.

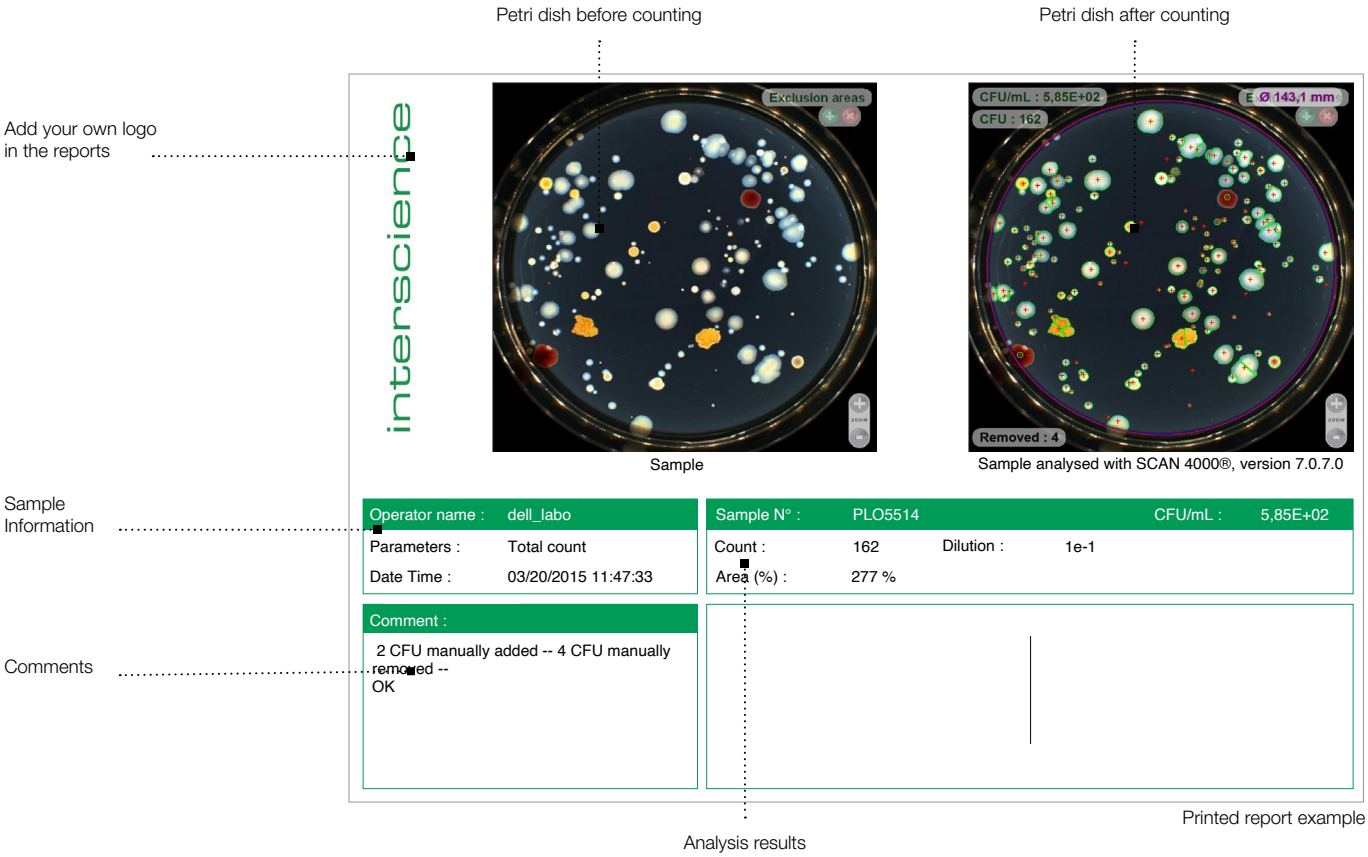
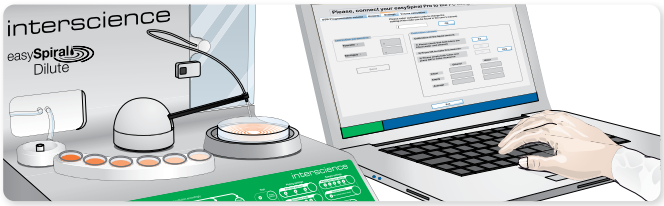


Plate & Count System® + dataLink™

Plate & Count System® + data**Link**™ offer quick and reliable results from automatic plating to colony counting with total traceability.

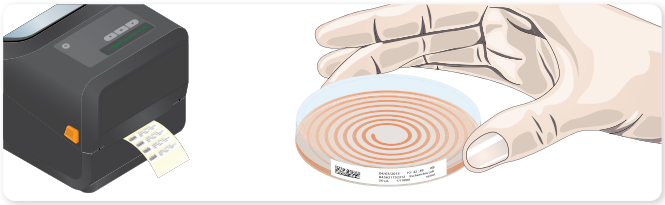
- **GREAT SAVINGS**: Up to 75% savings in time, consumables and space
- **QUICK**: Full plating cycle in 25 seconds and counting in 1 click. No need of manual data input as the Scan® colony counter retrieves it and adjusts automatically.
- **RELIABLE**: Repeatable and reproducible results up to 98%
- **FULL TRACEABILITY WITH** data**Link**™: Automatic saving of data and results

How does it work ?



STEP 1

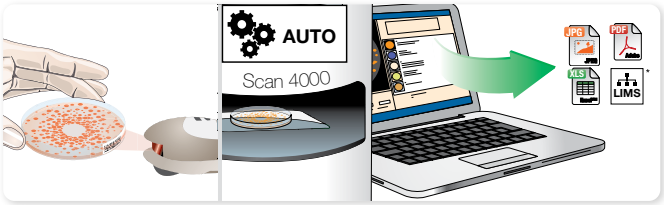
Plate with easy**Spiral Pro®** or easy**Spiral** Dilute®.
Software collects the plating data.



... 24-72 h incubation

STEP 2

Print the label with Datamatrix code. Stick the label on the plated Petri dish and place in the incubator.



STEP 3

Once the colonies have grown, scan the Datamatrix code. The **Scan®** colony counter automatically adjusts its settings thanks to the Datamatrix label's data. Click on "COUNT". Export the data.

* Please check LIMS compatibility

data**Link**™
Petri dish labeling solution
The essentials

Ref. 410 100

data**Link**™ pro
Petri dish labeling solution
Premium choice

Ref. 439 050

Technical specifications

		Scan® 4000
	Référence	438 000
OVERVIEW	Painted stainless steel shell	✓
	LIMS/SIL connection	✓
	USB connection	✓
	Available with dataLink™/dataLink™ pro traceability system	✓
	Counting on pour, surface, Spiral® and circle plated Petri dishes	✓
	Counting on chromogenic dishes	✓
	Counting on Petrifilm™, Compact Dry™, MC-Media Pads™, EasyPlate™, filtration membranes	✓
	Automatic counting	✓
	Inhibition zone reader	✓
	Minimal size of colony: 0.05 mm	✓
	Automatic detection of Petri dishes	✓
	Counting on 100% of the Petri dish	✓
	White LED lighting without reflections	✓
COUNTING	Counting	Automatic with manual control
	Automatic separation of clustered colonies	✓
	Creation of polygonal exclusion zones	✓
	Manual control to add or substract colonies	✓
	Counting on Petri dishes up to 150 mm	✓
	Counting time	Up to 1000 colonies per second
	Minimal size of colony	0.05 mm
INHIBITION ZONE READING	Antibiotic disc detection	Automatic with possibility to add or remove manually antibiotics
	Automatic detection of antibiogram support	Disks (several brands simultaneously), wells, peni-cylinder (steel, plastic)
	Display resolution	± 0.1 mm
	Inhibition zone measurement accuracy	± 0.2 mm
	Number of antibiotic paper disks	Up to 16 antibiotics on 120 mm square dish
	Reading time	16 inhibition zone reading between 2 to 4 s max.
	Interpretation system	CA-SFM Human health / EUCAST / CA-SFM Veterinary / CLSI (Clinical, Laboratory Standards Institute) / Customizable list

SPECIFICATIONS	Color camera	Ultra HD CMOS
	Lens	HD japanese lens
	Zoom	x 69
	Resolution (megapixels)	5
	White LED Lighting technology	White LED Dome
	LED Lighting system	Automatic with 7 combinations, top and/or bottom light, white or black background
	Petri dish size	Ø 55 mm to 150 mm round Petri dishes and 120 mm square Petri dishes
	Color detection	7 colors on the same dish + 1 color to exclude
	Languages	English, French, Japanese, Chinese, Russian, Spanish, German
	Warranty	3-year (after recording the warranty card)
	Spare parts availability	10 years
	In compliance with	21 CFR Part 11, ISO 7218 and AOAC 977.27
TRACEABILITY	USB Data export	To LIMS, PDF report, jpg, png and bmp images, Excel™ recountable session
	Data security	Modified data traceability in conformity with 21 CFR part 11
	Results/traceability	Image / sample number / comments / date / time / antibiotic name / bacterial name / measured diameter / result categorized according to standards / minimum and maximum critical diameter
PC MINIMUM REQUIREMENTS	Operating sytem	Windows™ 10 or 11 (or higher)
	Processor	Intel i5, 2.8 GHz Quad-Core or higher
	RAM	4 GB for use of the Scan
	Equipments	1 USB port free
	Screen	1280 X 1024 pixels or higher
	Software updates	3 years excluding qualification (after registration of warranty card)

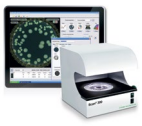
Certified production

1 Scan software, 1 15V power supply, 1 USB cable, 3 validation plates, 1 user manual, 1 conformity certificate / warranty card

WEEE 2002/96/EC · RoHS 2002/95/EC · MADE IN FRANCE · CE · UK CA

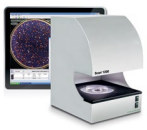
Product made for INTERSCIENCE by Interlab, an ISO 9001 certified company.

Scan® range



Scan® 300
Essential
Ref. 436 300

Scan® 500
Efficiency
Ref. 436 000



Scan® 1200
High resolution
Ref. 437 000

Scan® 4000
Ultra-high resolution
Ref. 438 000

Contact us for full information about the Scan® colony counter range.

Your local distributor

interscience

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