Scan® 4000

ambifood®

Automatic colony counter
Inhibition zone reader

unbeatable
image quality

interscience quality

- Designer and manufacturer since 35 years
- From sample prep' to microbiological analysis: a complete range of products
- Present in more than 85 countries
- Designed and made in France

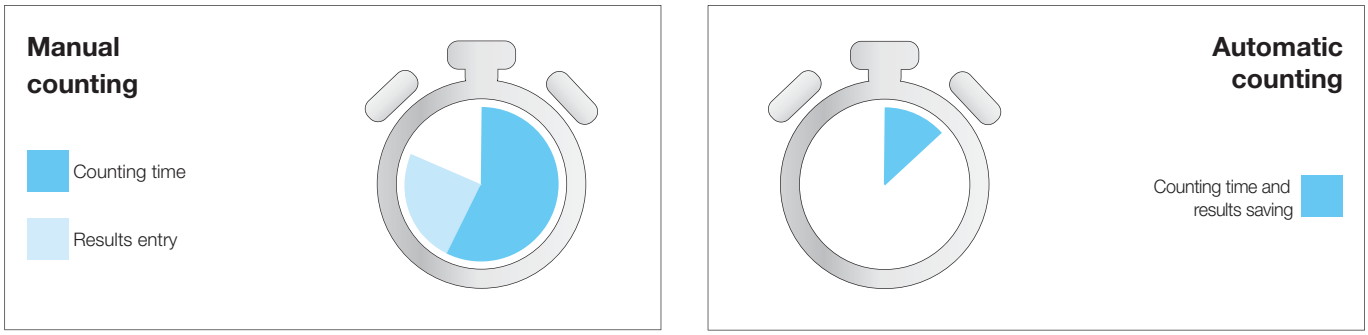
Scan® 4000

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.

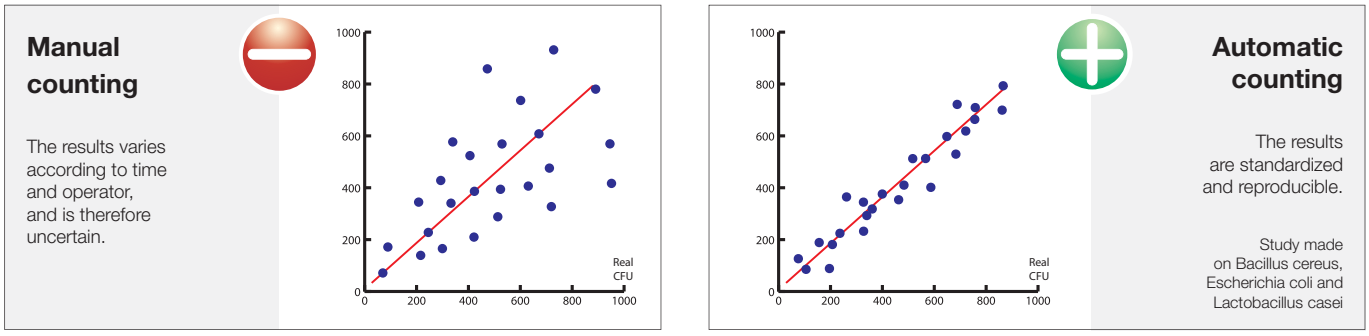
Why use a colony counter?

1 Productivity



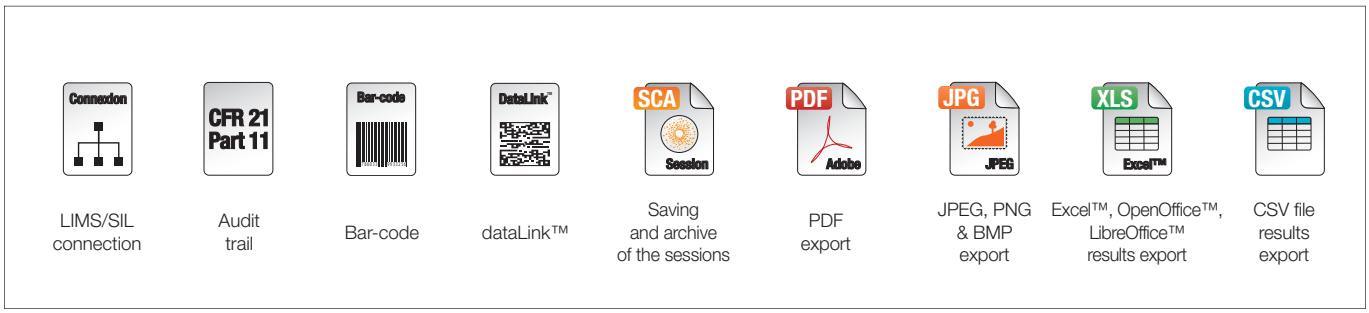
If you count at least 50 Petri dishes per day, with the Scan® 4000 you can reduce the reading time up to 80 % as it counts up to **1000 colonies in 1 second!**

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 CCD 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 (CCD)	-	-	✓	✓
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

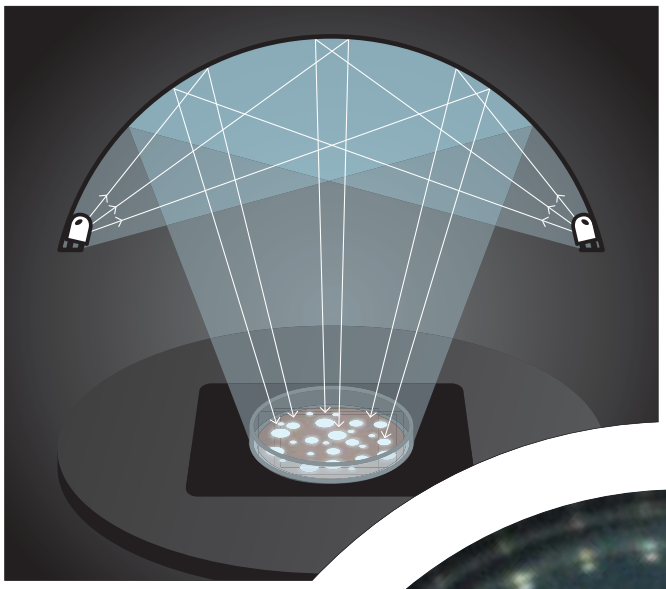
Robust

304L stainless steel hardware
Shock-proof glass

IN CONFORMITY WITH

ISO 7218 | ISO 4833-2 | ISO 15189 | XP V08-034 | NF V08-100 | AOAC 977.27 | FDA BAM Bacteriological Analytical Manual | CFR 21 Part 11 | EUCAST European Committee on Antimicrobial Susceptibility Testing | 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.

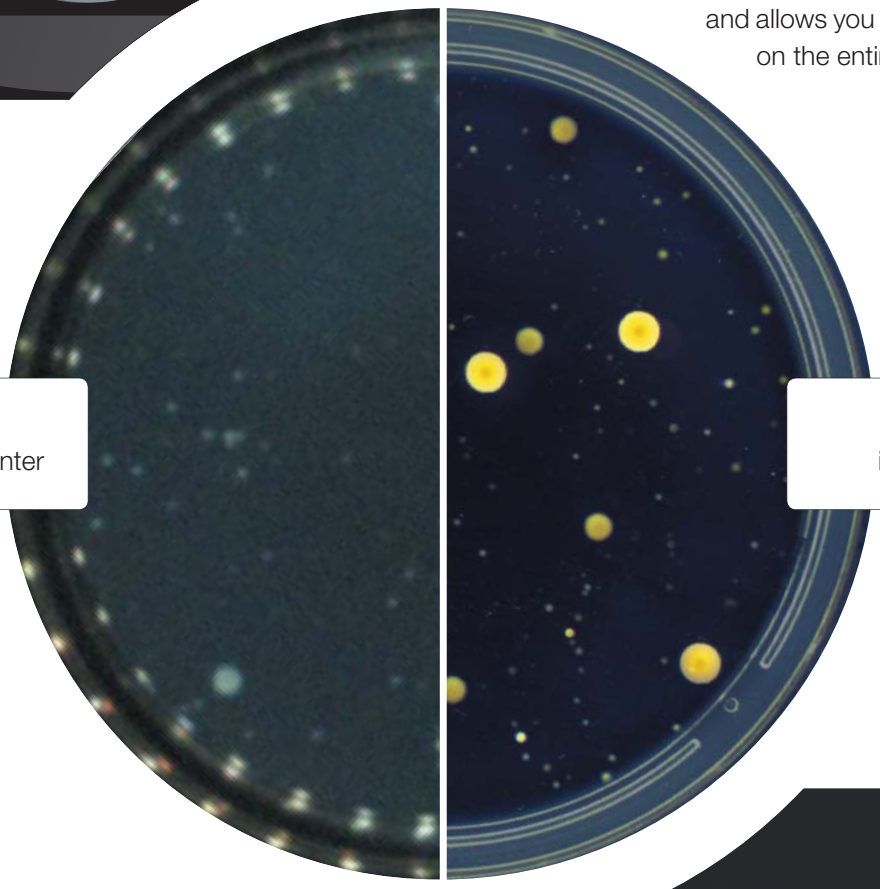
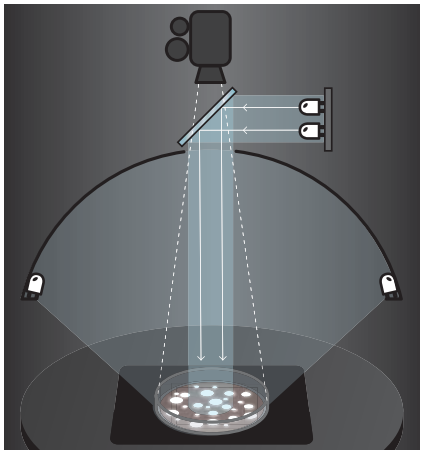


Image quality with a classic counter

Scan® 4000 image quality

Ultra High Resolution camera

Equipped with a German 5 megapixels CCD 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.

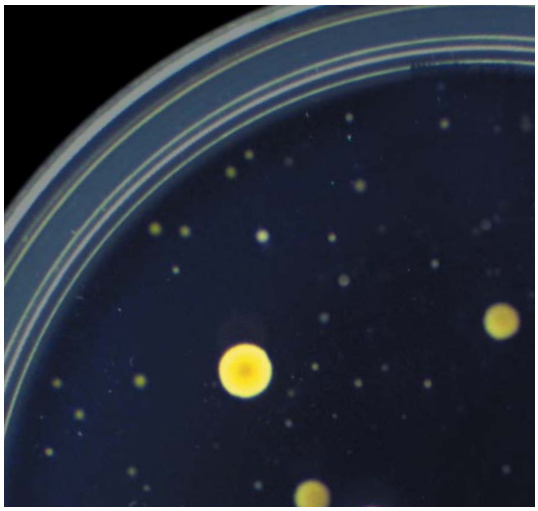
We have designed a special mirror with its own lighting enabling to compensate this reflection for a lighting without a single reflection.

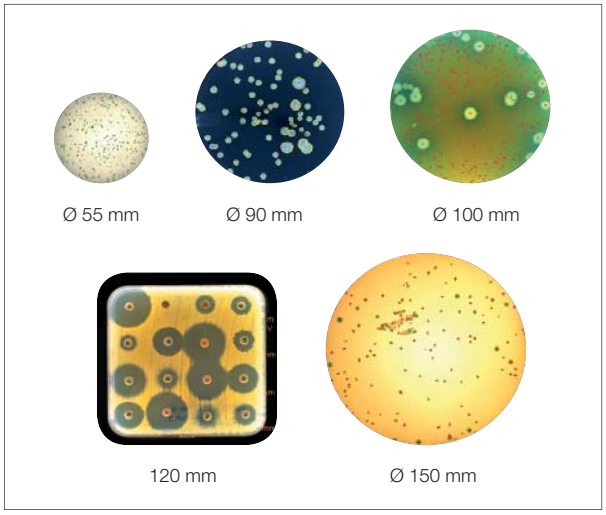
Reading on 100 % of the surface of the Petri dish

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 CFR21 Part 11

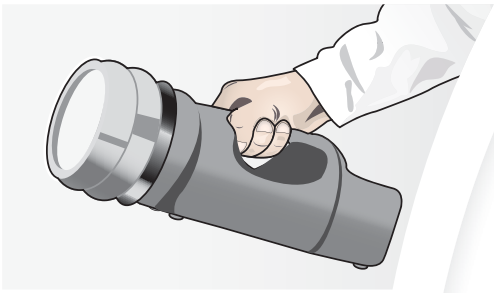
The Scan® software is in compliance with the FDA guidelines, as electronic signatures, audit trail and securing of the results. The management of the operators is integrated in the software for greater security and user-friendliness. The supervisor can manage the accounts and passwords automatically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

CFR 21
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.

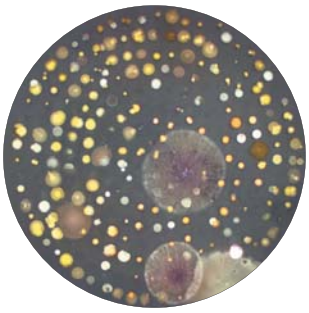
With Scan® 4000 you have complete traceability on your air quality. Your auditors will be happy!

The integrated management in the CFR21 part 11 V8 software enables more security and flexibility.

Antibiotics efficiency measurement

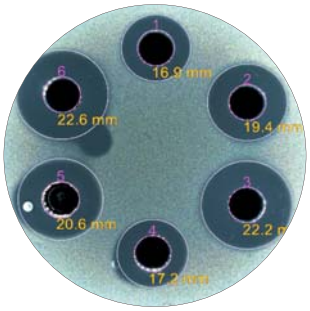
During the manufacturing of antibiotics, it is necessary to compare the efficiency of the antibiotic with a reference.

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.

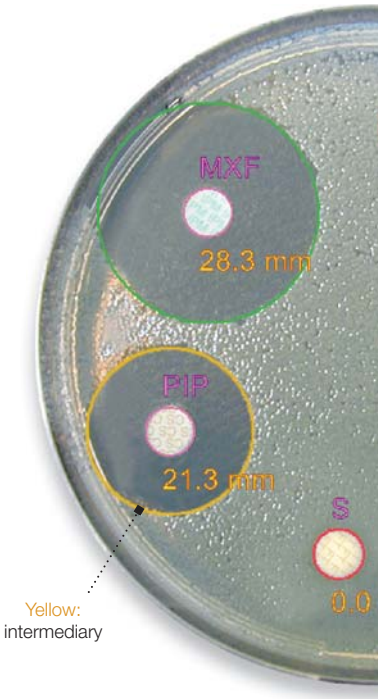


Air analysis
on TSA

Removed peni-cylinders
on TSA agar

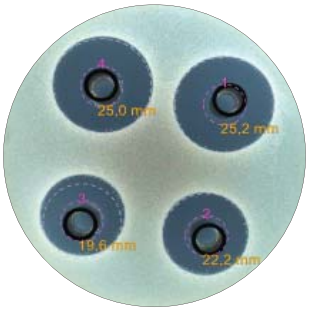


Wells
on TSA agar

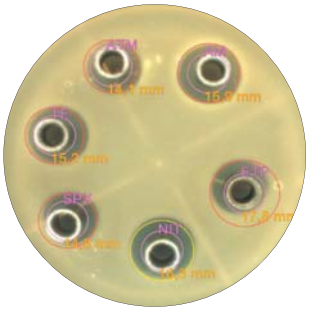


Yellow:
intermediary

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.

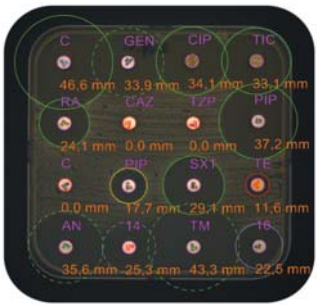
Included database + customizable database:

EUCAST European Committee on Antimicrobial Susceptibility Testing
European Society of Clinical Microbiology and Infectious Diseases

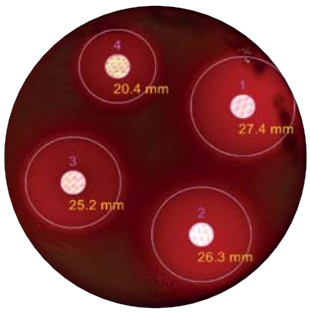
sfm Société Française de Microbiologie — Santé humaine

sfm Société Française de Microbiologie — Vétérinaire

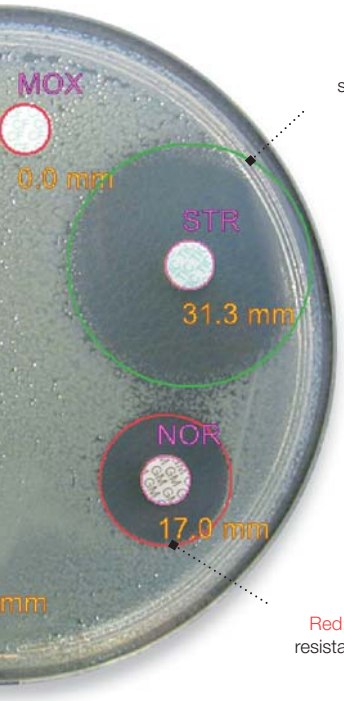
Clinical and Laboratory Standards Institute



Square Petri dish ø 120 mm

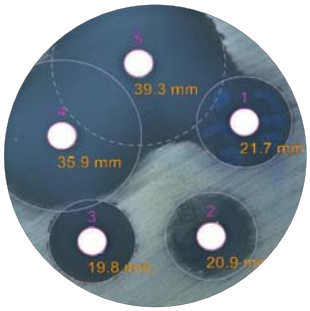


Paper disks on blood agar

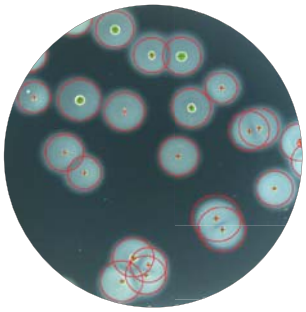


Green: sensitive

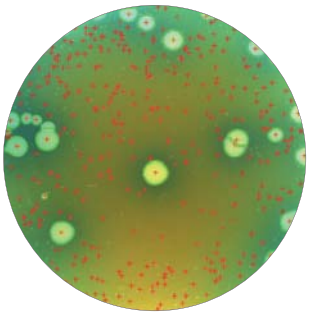
Red: resistant



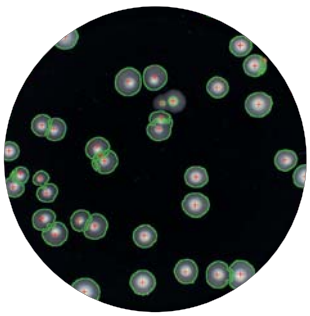
Paper disks on Mueller Hinton agar



Staphylococcus on Baird Parker agar



Pseudomonas on Hektoen agar



Legionella on GVPC agar

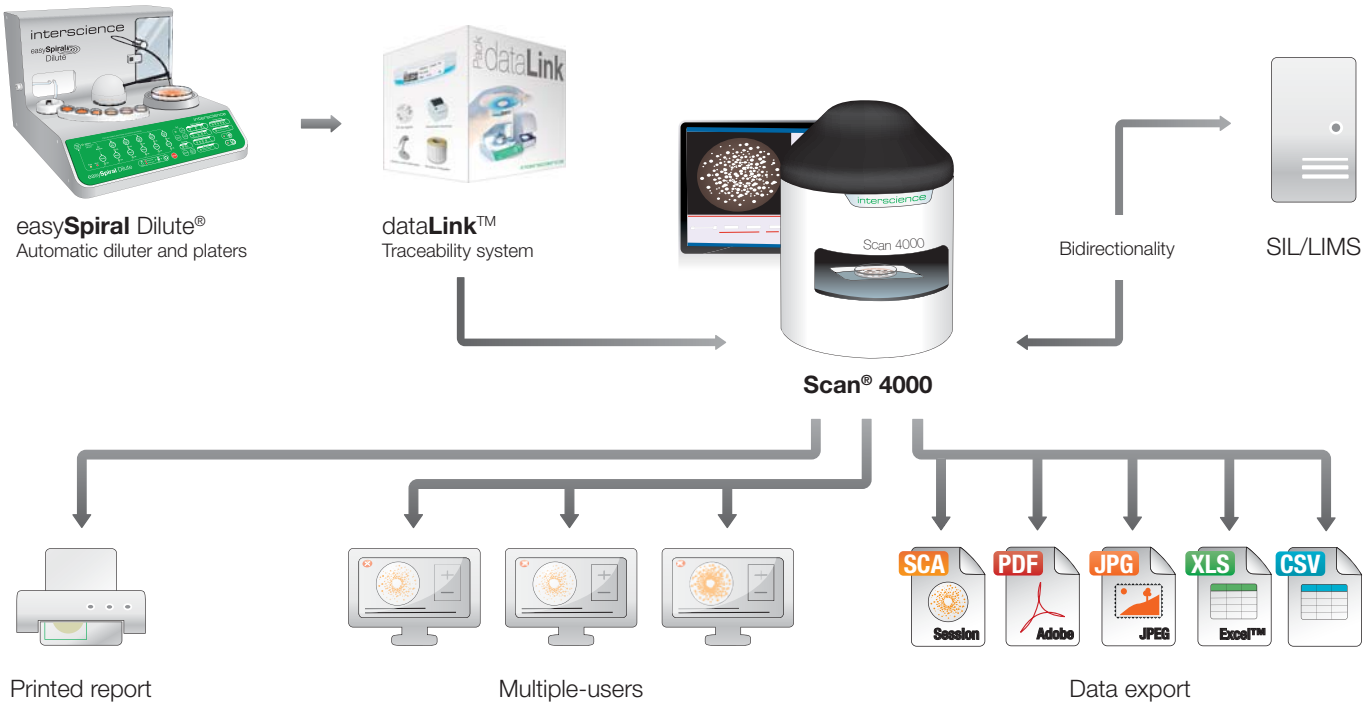
Food industries

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™, NeoFilm™, Sanita-kun™, Compact Dry™ and filtration membranes.

Traceability



easySpiral Dilute®
Automatic diluter and platers

data**Link**™
Traceability system

Bidirectionality

SIL/LIMS

Scan® 4000

Printed report

Multiple-users

Data export

Results print

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

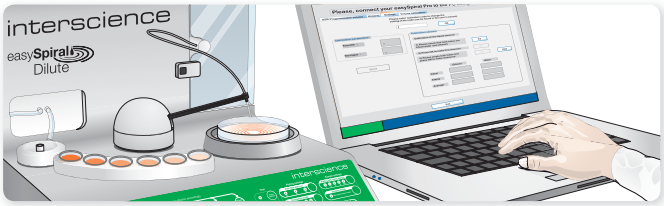
Plate & Count System® + dataLink™

easy**Spiral** Dilute®
and **Scan® 4000**

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 ?



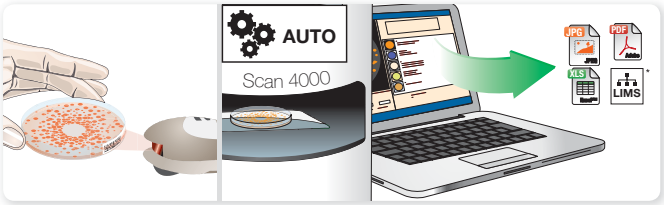
STEP 1

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

STEP 2

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

... 24-72 h incubation



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

Accessories

data**Link**™
Full traceability system

Ref. 410 100

Bar-code reader
Traceability in 1 click

Ref. 522 000

Technical specifications

	Scan® 4000
Reference	438 000
Camera	Ultra HD CCD color camera
Lens	Ultra HD Japanese lens
Digital zoom	x 69
Resolution	5 megapixels
Counting time	1000 colonies per second
Minimum size colony	0.05 mm
Inhibition zone measurement accuracy	± 0.1 mm
Lighting	White LED Dome
Lighting system	Automatic : 7 combinations, white lighting above and/or below, black background
Counting	Automatic with manual control
Round Petri dishes up to ø 150 mm Square Petri dishes 120 mm	
Counting on pour, surface, Spiral® and circle plated dishes	
Counting on chromogenic dishes	
Measurement up to 16 inhibition zones	
Counting on Petrifilm™	
Counting on NeoFilm™/Sanita-kun™	
Counting on Compact Dry™	
Counting on filtration membranes	
Automatic detection of paper disks, agar wells, peni-cylinders	

	Scan® 4000
Results/Data export	Recountable Scan® session, PDF report, JPEG, PNG, BMP, Excel™
Color detection	7 colors on the same dish
LIMS/SIL connection	
USB connection	
Languages	English, French, Japanese, Chinese, Russian, Spanish, German
Dimensions (w x d x h)	47 x 47 x 64 cm
Weight	25 kg
Hardware	Stainless steel
Power	100-240 V~ 50/60 Hz
Operating systems	Windows™ 7 or 8 or 10
Processor	Quad core, Intel i5 or i7 or AMD FX 6000 or superior
RAM	4 Go
Graphic card	AMD or NVIDIA (chipsets are not recommended)
Equipment	USB port / CD-ROM reader
Screen	1280 X 1024 pixels and more

Delivered with: Scan® software CD-ROM, power cord, 3 validation plates, user's manual, quick user guide

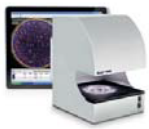
3 year warranty / Free software update during 3 years (after registration)

Certified production

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.

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