Scan[®] 4000

Automatic colony counter Inhibition zone reader



interscience



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

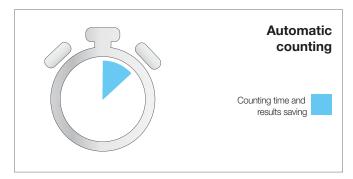
Scan® 4000 is an ultra HD automatic colony counter and inhibition zone reader for high resolution color reading of colonies and inhibition zones.

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?

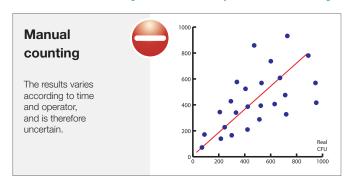
1 Productivity

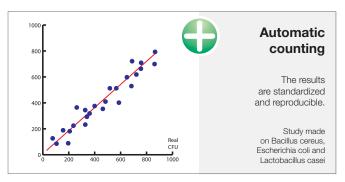




If you count at least 50 Petri dishes per day, with the Scan® 4000 you can reduce the reading time up to 80 % as it counts up to **1000 colonies en 1 second!**

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 64 Live camera image

Total traceability

Bidirectional connectivity



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	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 $^{\text{TM}}$, filtration membranes	-	-	✓	✓
High sensitivity sensor (CCD)	-	-	✓	✓
Ultra HD camera (5 megapixels)	-	-	-	✓
Round Petri dishes up to ø 150 mm Square Petri dishes 120 mm	-	-	- 1	✓
White LED Dome lighting	-	-	-	✓

Beam Splitter

Avoids reflections of the camera on the Petri dish



IN CONFORMITY WITH











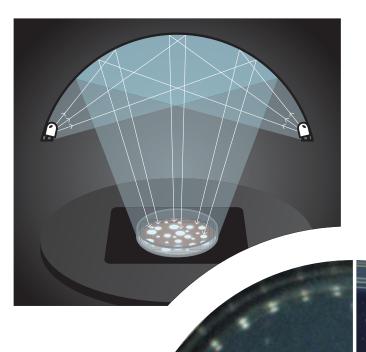








Innovative features



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.

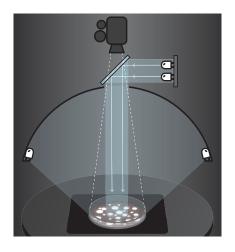
Scan® 4000

image quality

Ultra High Resolution camera

Image quality with a classic counter

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.

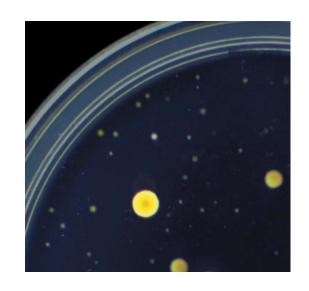
We have designed a special mirror with its own lighting enabling to compensate this reflection for a lighting without a single reflection.

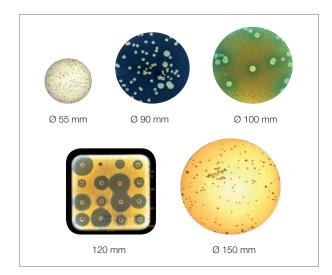
Reading on 100 % of the surface of the Petri dish

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. With its scratch-resistant glass no counting mistakes!

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 21Part 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!

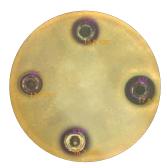
The integrated management in the CFR21 part 11 V8 software enables more security and flexibility.



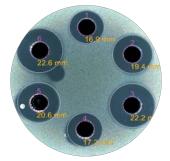
Antibiotics efficiency measurement

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.



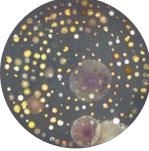
Removed peni-cylinders on TSA agar



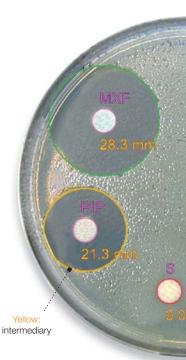
Wells on TSA agar



Peni-cylinders on TSA agar



Air analysis on TSA



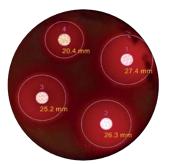
Round Petri dish ø 90 mm

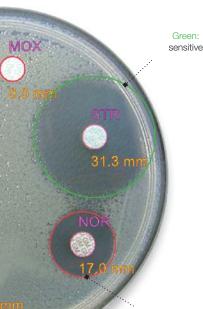


Peni-cylinders on TSA agar

C GEN CIP TIC 45.6 m/n 33.9 mm 34.1/mp 33.1/mm 7 PiP 24.1 mm 0.0 mm 0.0 mm 37.2 mm C ST TE 0.0 mm 17.7 mm 29.1 mm 11.6 mm AN 14 TM 35.6 mm 25.3 mm 43.3 mm 22.5 mm

Square Petri dish ø 120 mm



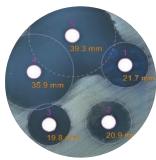


Red: resistant

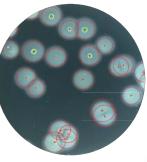
Paper disks on blood agar

Pseudomonas

on Hektoen agar



Paper disks on Mueller Hinton agar



Staphylococcus on Baird Parker 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.

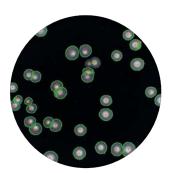
Included database

+ customizable database:









Legionella on GVPC agar

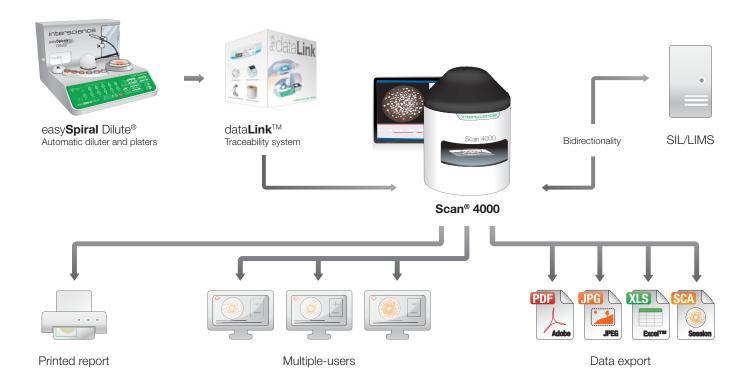
Food industries

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 TM , RIDA TM Count, Compact Dry TM and filtration membranes.

Traceability



Results print

Export your results to your PC, save them via Excel™, PDF, SCA, BIO and export the images in JPEG, PNG and BMP.



Plate & Count System® + dataLink™



Plate & Count System® + dataLink $^{\text{TM}}$ 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 dataLink™: Automatic saving of data and results

How does it work?



STEP 1

Plate with easy**Spiral** Pro® or 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





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 64
Resolution	5 megapixels
Counting time	1000 colonies per second
Minimum size colony	0.05 mm
Lighting	White LED Dome
Lighting system	Automatic : 6 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 RIDA™ Count	✓
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 Dimensions (w x d x h) 47 x 47 x 64 cm Weight 24.4 kg Hardware Stainless steel Power 100-240 V~ 50/60 Hz Operating systems Windows™ 7 or 8 or superior Processor Quad core, Intel i5 or i7 or AMD FX 6000 or superior RAM 3 Go Equipment USB port / CD-ROM reader Screen 1280 X 1024 pixels and more		
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Processor Quad core, Intel i5 or i7 or AMD FX 6000 or superior RAM 3 Go Equipment USB port / CD-ROM reader	Power	100-240 V~ 50/60 Hz
Processor or AMD FX 6000 or superior RAM 3 Go Equipment USB port / CD-ROM reader	Operating systems	Windows™ 7 or 8 or superior
Equipment USB port / CD-ROM reader	Processor	· · · · · · · · · · · · · · · · · · ·
	RAM	3 Go
Screen 1280 X 1024 pixels and more	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 guarantee / Free software update during 3 years (after registration)

Certified production











Scan® range



Scan® 300

Ref. 436 300



Scan® 500 Efficiency Ref. 436 000



Scan® 1200 High resolution

Ref. 437 000



Scan® 4000

Ultra-high resolution

Ref. 438 00

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

Distributor



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