

# Scan 4000

Ultra-HD colony counter

Scan 4000, automatic HD color colony counter, is adapted to all sizes of Petri dishes and all media culture. Its indirect lighting ensures great user comfort, high accuracy and excellent reproducibility.

### Features

#### 1. HIGH QUALITY

- Stainless steel body
- Ultra HD color camera
- Digital zoom x 64
- Resolution: 5 mega-pixels
- Counting: 1000 colonies per second
- Colony minimum size: 0.05 mm

#### 2. THE LARGEST READING RANGE ON THE MARKET

- Round Petri dishes from  $\varnothing$  55 to  $\varnothing$  150 mm
- Square Petri dishes of 120 mm
- Chromogenic Petri dishes
- PetriFilm™
- RIDATM Count
- Compact Dry™
- Filtration membranes

#### 3. UNEQUALLED LIGHTING

- 360° LED lighting, without reflection or shadow of the dish with White Dome
- CCD 5 megapixels camera, detects bare eye invisible details
- Beam Splitter to ensure lighting 100% without reflections or shadows
- Automatic detection of the dish + reading on 100% of the dish

#### 4. SOFTWARE EFFICIENCY

- All functions in 1 window
- Automatic optimization of the contrast, luminosity and sensitivity
- Automatic corrections of the agar defects
- Automatic separation of confluent colonies
- Automatic elimination of counting grids
- Cross on each counted colony
- Polygonal exclusion areas
- Pre-set medias: PCA/TSA, MRS, VRBL, TBX, TSC, Baird Parker, GVPC, L.Mono, YM

#### 4. INHIBITION ZONES

- Rapid detection: up to 16 antibiotic sensitivities per dish in 1 click
- 3 diffusion modes: paper disks (all brands), wells, peni-cylinders
- Inhibition zones and agar wells can be manually added or deleted
- Built-in antibiotic database: CA-SFM (French Society of Microbiology), EUCAST (European Committee on Antimicrobial Susceptibility Testing)
- Accuracy of inhibition zone measurement: 0.05 mm





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## 5. FULL TRACEABILITY

- Harmonization of the results within a team
- Automatic archiving and printing of data: pictures, comments & results
- External traceability (Session saved, Excel, PDF, JPEG, BMP, Scan printed report)
- Internal traceability (Barcode, file archive, LIMS connection)
- Securitization of the sessions (Compliance with CFR 21 part 11: system securitization, operational controls and documentation management)

## 5. EXCELLENT REPRODUCIBILITY AND REPEATABILITY

- GLP (Good laboratory Practice)
- In compliance with :
  - CFR 21 part 11
  - ISO 15189
  - ISO 7218
  - ISO 4833-2
  - NF V08-034
  - NF V08-100
  - AOAC 977.27
  - FDA-BAM standards

## Scan SOFTWARE

Scan automatic colony counters use an exclusive software developed by INTERSCIENCE: evolutive, user-friendly and powerful.

There are numerous advantages in using Scan counting software:

- Only one clic to count
- Only one setting cursor
- Traceability: automatic saving of data, Excel export

## 1. VISUALISATION WINDOW

Detected colonies are highlighted and marked with a cross.

## 2. PARAMETERS WINDOW

Only one cursor to optimize counting. customizable settings adaptable to any kind of agar.

## 3. RESULTS WINDOW

All previously recorded data can be checked anytime.

## EASY DATA EXPORT

Scan software provides easy ways to export quickly your results:

- Work sessions saving
- PDF export
- JPEG, BMP export
- Results exported to Excel
- Scan printed report

## Applications

### PHARMACEUTICAL INDUSTRIES

- Sterile room monitoring  
The Scan 4000 enables the reading and recording of air samples for bacteriological control of sterile rooms.  
With Scan 4000, you have complete traceability on your air quality. Your clients will be really satisfied about it  
The integrated management in the CFR part 11 V8 software enables more security and flexibility.

- Antibiotics efficiency measurement  
During antibiotics manufacture, it is necessary to compare the efficiency of the antibiotic with a reference.  
Scan 4000 enables the reading of inhibition zones, with peni-cylinders, without peni-cylinders or agar well.

### MEDICAL AND VETERINARY INDUSTRIES

- Antibiotics sensitivity  
For bacteriological labs, hospitals and clinic, the use of Scan 4000 reads 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: intermediary
  - Green: sensitive

The color image of the Petri dish is HD.

### FOOD INDUSTRIES

- Quality control  
For food instries, during microbiological analyses, the counting step is capital.  
Scan 4000 count colonies with results' export and guarantee of traceability on all media used in labs. Get instant results and traceability on Petri dishes (55-150 mm), Spiral plated dishes, PetriFilm, RIDA Count, Compact Dry and filtration membranes.



# Scan 4000

EXAMPLE OF A SCAN PRINTED REPORT

Add your own logo in the reports

Sample Information

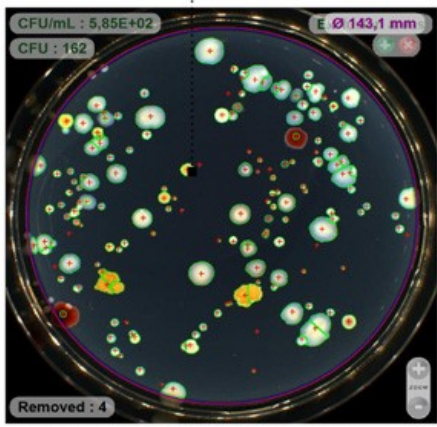
Comments

Petri dish before counting

Petri dish after counting



Sample



Sample analysed with SCAN 4000®, version 7.0.7.0

Operator name :	dell_labo	Sample N° :	PLO5514	CFU/mL :	5,85E+02
Parameters :	Total count	Count :	162	Dilution :	1e-1
Date Time :	03/20/2015 11:47:33	Area (%) :	277 %		
Comment :	2 CFU manually added -- 4 CFU manually removed -- OK				

Analysis results

Printed report example



# Scan 4000

### TECHNICAL SPECIFICATIONS

- All stainless steel body
- Color HD CCD camera
- HD japanese lens
- Digital zoom x64 (enabling to see the letters on the disks)
- Resolution: 1.2 mega-pixels
- Counting: 1000 colonies per second
- Minimum size of colony: 0.05 mm
- Lighting equipment: long-life white LEDs / Dark Field
- Lighting system: automatic with 6 combinations, top and/or bottom light, white or black background
- Counting: automatic with manual control
- Results: Scan file (recountable), PDF report, jpeg, png, bmp, Excel
- LIMS connection
- USB connection
- Counting on Petri dishes 55 - 150 mm
- Counting on Spiral plating
- Color detection: 7 colors on the same dish
- Counting on chromogenic medium
- Counting on PetriFilm
- Counting on RIDA Count
- Counting on Compact Dry
- Counting on filtration membranes
- Automatic separation of confluent colonies
- Creation of polygonal exclusion areas
- Manual control of adding or removing colonies
- Inhibition zone reading on 90-100 mm round dishes and 120 mm square dishes
- Inhibition zone measurement: automatic with manual control
- Automatic detection of paper disks (all brands simultaneously), wells, peni-cylinders (steel, plastic), customizable, add/susbstract manually
- Maximum number of antibiotics: up to 16 antibiotics on a square 120 mm dish
- Reading time: mesurement of 16 inhibition zones between 2 and 4 seconds maximum
- Interpretation system: CA-SFM Human Health / EUCAST / CA-SFM Veterinary / customizable list
- Security of data: saving of all data changes in compliance with CFR 21 recommendations / Connection to LIMS / SIL systems
- Results / Traceability: image / sample cumber & antibiotic name / bacteria name / read diameter / result with category SIR by colour code (Sensitive : Intermediate : Resistant) / critical diameter mini and maxi / comments / date / time
- Software available in english, french, spanish, japanese, chinese, russian
- Power: 100-240V~ / 50-60Hz
- Dimensions: (L x l x H) : 47 x 47 x 64 cm, weight: 24,4 kg
- Guarantee (after registration) : 3 years
- Software update (after registration) : 3 years
- In compliance with CFR 21 part 11, EUCAST, CA-SFM, ISO 7218, ISO 4887-2 standards
- Designed and made in France
- Manufactured under: ISO 9001 V2008, CE, WEEE 2002/96/EC, RoHS 2002/95/EC



# Scan 4000

Scan 4000	
Reference	438 000
Camera	HD CCD color camera
Digital zoom	x 64
Resolution	5 megapixels
Counting time	1000 colonies per second
Minimum size of colony	0.05 mm
Lighting technology	White LED dome
Lighting system	Automatic: 6 combinations, top and/or bottom light white or black background
Counting	Automatique with manual control
Counting on Petri dishes	Square and round Petri dishes Boites de Petri 55-150 mm
Counting on pour, surface, Spiral and circle plated dishes	✓
Counting on chromogenic dishes	✓
Inhibition zone measurement	✓
Counting on PetriFilm	✓
Counting on RIDA Count	✓
Counting on Compact Dry	✓
Counting on filtration membranes	✓
Results / data export	Recountable Scan file, 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
Power	100-240 V 50/60 Hz
Processor	(Quad core recommended) Intel i5 or i7 or AMD FX 6000 or superior
Operating systems	Windows 7 Service Pack 1 or Windows 8 or ulterior
Frequency	2.4 Ghz or superior
RAM	3 Go
Graphic card	AMD or NVIDIA (chipsets are not recommended)
Equipment	CD-ROM reader, USB port 2.0 minimum
Screen	1280 X 1024 pixels and more
Computer	Desktop computer recommended
Hardware	All stainless steel
Software update (after registration)	3 years
Guarantee (after registration)	3 years



# Scan 4000

	Scan 300	Scan 500	Scan 1200	Scan 4000
Reference	436 300	436 000	437 000	438 000
Camera	CCD color camera	CMOS color camera	HD CCD color camera	Ultra HD CCD color camera
Digital zoom	x 28		x 64	
Resolution	1 megapixels		1.2 megapixels	5 megapixels
Counting time	1000 colonies per second			
Colony minimum size	0.1 mm		0.05 mm	
Lighting	Long-lasting white LEDs / Dark Field			White Dome LED
Lighting system	Automatic: 6 combinations, top and/or bottom light white or black background			
Counting	Automatic with manual control			
Counting on Petri dishes	55-90 mm		Round and square Petri dishes	
Counting on pour, surface, Spiral and circle plated dishes			✓	
Counting on chromogenic dishes	-		✓	
Inhibition zone measurement	-		✓	
Counting on PetriFilm	-			✓
Counting on RIDA Count	-			✓
Counting on Compact Dry	-			✓
Counting on filtration membranes	-			✓
Results / data export	Recountable Scan file, 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 (l x p x h)	27 x 27 x 29 cm	27 x 27 x 38 cm		47 x 47 x 64 cm
Weight	6,6 kg	8.7 kg	24.4 kg	
Power	100-240 V 50/60 Hz			
Processor	Intel Core i3, i5 or i7 or AMD FX serie 8000 or superior		(Quad-core recommended) Intel i5 or i7 or AMD FX 6000 or superior	
Operating system	Windows™ 7 Service Pack 1 or Windows™ 8 or ulterior			
Frequency	2,5 Ghz or superior		2,4 Ghz or superior	
RAM	3 Go ou superior			
Graphic card	AMD or NVIDIA (chipsets not recommended)			
Equipment	CD-ROM port, USB port 2.0 minimum			
Screen	1280 X 1024 pixels and more			
Computer	Desktop recommended			
Hardware	All stainless steel			
Software update (after registration)			3 years	
Guarantee (after registration)			3 years	