ÌUL micro

Catalog 2023

Instruments for more comfortable, reliable,
and safer microbiological control for
the industry.

ÌUL

IUL

Bringing innovation into classic microbiology.

36 years of experience.

Since 1987, IUL has been designing, producing, and marketing automated solutions for microbiology laboratories.
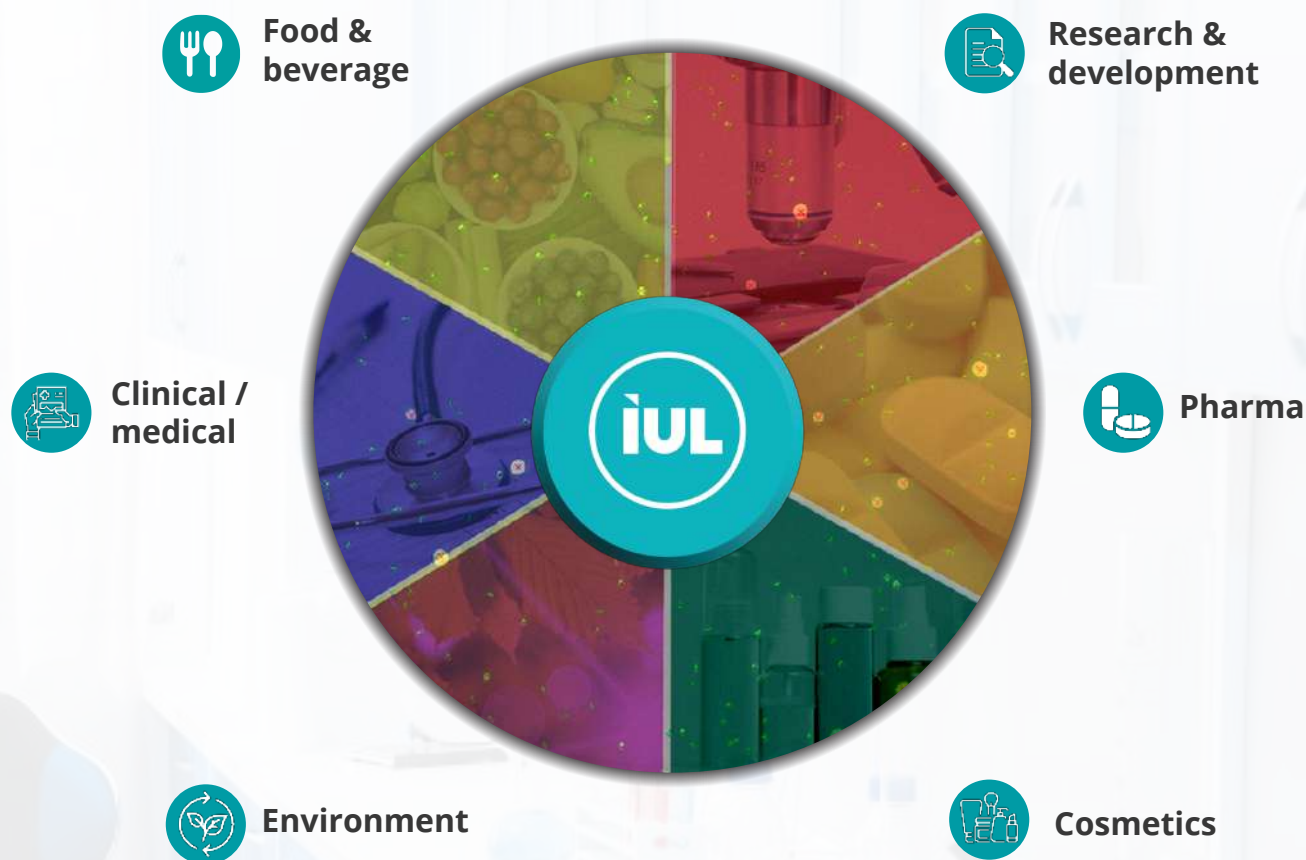
Today IUL products are present in more than 100 countries around the world.

Headquarters in Barcelona.

IUL market sectors

Food & beverage

Research & development

Clinical / medical

iUL

Pharma

Environment

Cosmetics

IUL compliance

ISO 9001

IQNET
RECOGNIZED
CERTIFICATION

Since 2003, IUL has set out the criteria for a quality management system that is ISO 9001 certified. We believe in continual improvement to provide value to our organization.

CE marking

CE

All our products are CE certified, that indicates conformity with health, safety, and environmental protection standards for products sold within the European Economic Area.

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Table of contents

Sample preparation

Homogenizers & gravimetric diluters

iUL

MASTICATOR & MAXICATOR

Paddle Blender

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◤ Main benefits

No Sample Cross Contamination

Samples are protected from any contamination during homogenization thanks to the use of sterile disposable bags.

Robust

Second to none in endurance, the Masticator's high quality spring system has proven to withstand the most challenging blending procedures.

Easy of use

The Masticators are easily cleaned when fully removing their front door.

Wide application scope

Choose the model that fits your needs. Compatible with 80, 400, or 3500 ml bags.

3-year warranty

◤ Product Overview

The Masticator is a laboratory paddle blender that carries out a profund homogenization in order to obtain a representative sample for food, cosmetics, pharmaceutical, and clinical quality control, while isolating them from any possible contamination.

The Masticator's high-quality and durable motor ensure safe and efficient homogenization. The Masticator homogenizes samples inside sterile bags thanks to its paddles that drive a masticating action while moving the sample from side to side. This key step in sample preparation ensures an homogenous distribution of microorganisms throughout the diluent. Several models encompass a wide array of possibilities.

◤ Paddle blender bags: strenght, endurance, sterilized

The bags are sterilized with gamma-irradiation ensuring no risk of cross-contamination. They hold three features that represent IUL's product quality: strength, endurance, and sterilization.

The side of the bags are perfectly sealed, without soiling or contaminating any part of the sample. These bags are manufactured from extruded polymer tubes using high-grade, food quality polythene. This brings unrivaled strength and endurance. IUL is ISO 9001 certified to quality management system standards, guaranteeing IUL quality performance.

Compact	Basic/Panoramic	Classic/Panoramic	Silver/Panoramic	MAXICATOR
80 ml bags*	400 ml bags*		400 ml bags with filter*	3500 ml bags*
WxHxD	WxHxD		WxHxD	WxHxD
100 mm x 150 mm x 56 mµ	100 mm x 150 mm x 56 mµ		165 x 260 mm x 60 mµ	380 mm x 500 mm x 70 mµ
*from 20 to 80 ml samples	*from 80 to 400 ml samples		*from 80 to 400 ml samples	*from 400 to 3500 ml samples

◤ Accessories & consumables

80 ml bags	400 ml bags	400 ml bags with filter	3500 ml bags
1. 2000 units (50 by 50) **Cat. 90002456**	**1.** 500 units (50 by 50) **Cat. 900014050**	**1.** 500 units (25 by 25) **Cat. 900014501**	**1.** 250 units (50 by 50) **Cat. 900014035**
2. 6000 units (50 by 50) **Cat. 90002457**	**2.** 5000 units (50 by 50) **Cat. 90005421**	**2.** 2000 units (25 by 25) **Cat. 90002451**	
		3. 5000 units (25 by 25) **Cat. 90002452**	

1. Stand and tray for any 400 ml Masticator
Cat. 9000742

2. Stainless steel holder for six 400 ml bags
Cat. 90002300

3. Stainless steel holder for six 80 ml bags
Cat. 90002380

4. Plastic tray
Cat. 9000743 (Masticator)
Cat. 900011524 (Maxicator)

Wide range for different uses

TIMER	PANORAMIC	STROKES	VOLUME
Configure the sampling to be timed.	Choose the panoramic version of Masticators to see the sampling process.	Set the number of strokes for second. *Available in: Masticator Silver, Silver Panoramic & Maxicator.	Select your model according to the volumes (80 ml, 400 ml & 3500 ml bags).

Workflow

1 Introduce the sample into the sterile bag.

2 Close the door leaving the top of the bag visible.

3 Set the parameters (timer, and strokes/second), and start the process closing the door.

4 Pick up the bag with the homogenized sample ready to be analyzed.

How to automate the whole process

Smart Dilutor W - Gravimetric Dilutor

Get a full processing capacity and traceability in gravimetric dilutions or liquid dispensing.

Eddy Jet 2W – Spiral plater

Eddy Jet 2W spiral plater is used to reduce the number of plates processed, offering a threefold decimal dilution counting range in a single plate.

Technical specifications

Model	Compact	Basic/Panoramic	Classic/Panoramic	Silver/ Panoramic	MAXICATOR
	80 ml bags	400 ml bags	400 ml bags	400 ml bags	3500 ml bags
Strokes/sec	10	8.5 (50Hz) 10 (60Hz)	8.5 (50Hz) 10 (60Hz)	5-6-7-8	3-4-5-6
Setting	Digital Timer	Digital Timer	Digital Timer	Keyboard/Display	Keyboard/Display
Timer	15/30/60/90s	15/30/60/90s	15/30/60/90s	15/30/60/90/120/ 150/180/210/240s	15/30/60/90/120/ 150/180/210/240s
Paddles & door	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Inner part	Stainless steel	Steel	Stainless steel	Stainless steel	Stainless steel
Dimensions (WxHxD)	15x15x30 cm 5.9x5x11.8 in	24x26x40 cm 9.4x10.2x15.7 in	24x26x40 cm 9.4x10.2x15.7 in	24x26x40 cm 9.4x10.2x15.7 in	44x50x57 cm 17.3x19.7x22.4 in
Weight	7 kg / 15.4 lb	17 kg / 37.5 lb	17 kg / 37.5 lb	20 kg / 44 lb	52.5 kg / 116 lb
No. of Paddles	2	2	2	2	4

Specifications subject to change without notice

Order information

1. Masticator Basic 400 ml.
   a. Cat. 9000470 (220/240 V)
   b. Cat. 9000471 (100/127 V)

2. Masticator Basic Panoramic 400 ml.
   a. Cat. 9000475 (220/240 V)
   b. Cat. 9000477 (100/127 V)

3. Masticator Classic 400 ml.
   a. Cat. 9000400 (220/240 V)
   b. Cat. 9000401 (100/127 V)

4. Masticator Classic Panoramic 400 ml.
   a. Cat. 9000500 (220/240 V)
   b. Cat. 9000501 (100/127 V)

5. Masticator Silver 400 ml.
   a. Cat. 9000420 (220/230 V)
   b. Cat. 9000421 (100 V)
   c. Cat. 9000461 (100/120 V)

6. Masticator Silver Panoramic 400 ml.
   a. Cat. 9000520 (220/230 V)
   b. Cat. 9000521 (100 V)
   c. Cat. 9000522 (100/120 V)

7. Masticator Compact 80 ml.
   a. Cat. 900085 (220/230 V)
   b. Cat. 900086 (100 V)
   c. Cat. 900087 (100/120 V)

8. MAXICATOR 3500 ml.
   a. Cat. 90002400 (220/230 V)
   b. Cat. 90002401 (100 V)

For more information
about **Masticator**, scan the QR code

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Allows compliance with:

FDA BAM	ISO 7218	ISO 6887-1
Bacteriological Analytical Manual	Microbiology of food and animal feeding stuffs	Microbiology of food chain

SMART DILUTOR W
Gravimetric Diluter

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◤ Main benefits

Ergonomic

Easy to work under laminar flow cabinets. Larger bag holder opening to facilitate the sample introduction.

High accuracy

Weight accuracy ≥ 99%
Dilution/dispensing accuracy > 99%

Sterility

Easy cleaning.

Autoclave

Parts that contact the diluent can be quickly disassembled to sterilize them in an autoclave.

Iconographic & friendly interface

4,8" capacitive touch screen with iconographic interface.

Traceability

Printer and barcode reader connection for sample traceability.

Scalable

1 or 2 built-in pumps.
Use it with bottles or ready to use media bags.

Programmable

Create your method to streamline the process.
PLUG- AND- PLAY!

99% accuracy

◤ Product Overview

The Smart Dilutor W is the solution for labs seeking full processing capacity and traceability in gravimetric dilutions or liquid dispensing. Its **precise weight cell** and **powerful peristaltic pumps** optimize gravimetric dilutions and liquid dispensing to food, pharmaceutical, and cosmetic quality control labs.

Smart Dilutor W is the **3rd generation of IUL's gravimetric** dilutors. IUL designed the first diluter in 1990 providing automation in sample preparation in microbiology lab workflow.

◤ Workflow

1

Place the bag in the platform and select your dilution or dispensing method.

2

Tare weight and introduce the sample in the plastic bag.

3

Pull the arm towards you to get the Smart Dilutor W ready to the **dilution/dispensing.**

4

Pull the arm backwards. Open the holder, and **take out the sample's plastic bag.**

◤ Technical Data

Weight range	1 g- 2400 g (tare included)
Display resolution	0.1 g
Weight accuracy	≥99% (for weight ≥5 g)
Sample weight resolution	0.01g (after stabilization)
Dilution accuracy	≥99% (for dilution weight ≥10 g) / ≥98% (for dilution weight ≥5 g)
Dilution ratio	Any fraction with numerator 1 to 99 and denominator 1 to 999
Dispensing range	5g to full weighting range
Delivery speed	100 ml/ 6 s
Selectable surface vibration compensation level	0-4
Integrated pumps	1 or 2
Touch screen	107,95 x 57,5 mm (4,81")
Mains	100~240 ACV 50/60 Hz
Power	40W
Dimensions (WxHxD)	300x265x325 mm (11,81x10,43x12,79 inch)
Weight	6.5 kg

Specifications subject to change without notice.

◤ Ordering Information

1. Smart Dilutor W two pumps. For bottles/For bags
   Cat. 90007901/90007901BS
2. Smart Dilutor W one pump. For bottle/For bag
   Cat. 90007900/90007900BS
3. Smart Dilutor W two pumps. For bottles and bags
   Cat. 90007901BB

For more information about
Smart Dilutor W, scan the QR code

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Inoculation

Spiral plater

iUL

EDDY JET 2W
Spiral Plater

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◢ Main benefits

Gain of time and waste reduction

2-in-1 method: dilution and plating for an efficient bacterial determination. Threefold dilution in one plate! Provide significant **time and cost improvement** while **reducing Petri Dish waste.**

No cross contamination

Sample collection through an exclusive patented microsyringe that guarantees reliable sterility.
No need to perform washing protocol, avoiding false-negative (trace of bleach), or false-positive results (biofilm formation).

Reliable

99% of reproducibility.

Easy to use

Intuitive, friendly color touchscreen with customed protocols to improve the comfort of the operator.

Connected

Barcode reader and printer connection for plate traceability.

Fast delivery

Minimal delivery time for a fast implementation.

3 dilutions in one plate

◢ Product Overview

The EddyJet 2W is a Spiral Plater that inoculates a known volume of liquid sample on the surface of a rotating agar plate in an Archimedean spiral pattern.

It **reduces cost per test**, hands on time, and consumable use during bacterial enumeration while increasing your microbiology lab's productivity.

Spiral Plating is a fully validated Microbiological method *[see ISO 7218 / AOAC 977.27 / FDA (BAM Ch.3)].*

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Types of spiral distributions

Eddy Jet 2W can perform up to 37 distributions. The purpose of spiral plating is to create areas with different sample concentrations in a single plate.

There are several types of distributions available: uniform, linear, and logarithmic.

Concentration

Uniform

Linear

Logarithmic

Distance from the center
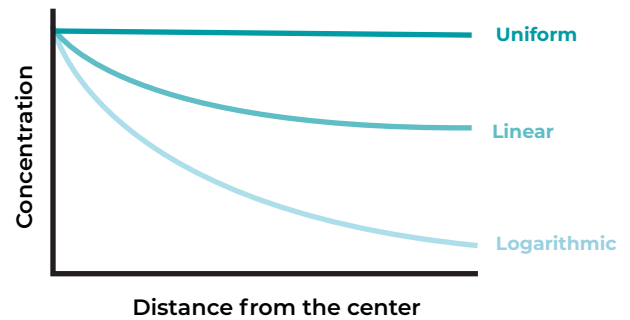
Uniform Mode

The volume of liquid poured in different segments of the spiral doesn't vary at all, sample concentrations remain constant regardless of their position in the spiral.

Linear Mode

Creates hyperbolic concentration gradients that are more moderate than those in exponential modes.

Logarithmic Mode

The volume of liquid poured decreases logarithmically providing a dramatic decrease in sample concentration along the different sections of the spiral.
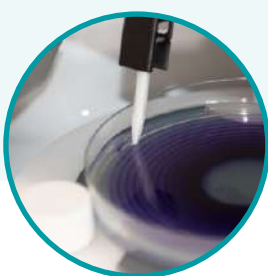
Avoid the cross-contamination with IUL's patented microsyringes

Reliability and accuracy

Eddy Jet 2W doesn't require to perform washing protocols thanks to its patented microsyringes.

Patented Microsyringes

The Eddy Jet 2W performs different types of spiral and lawn inoculations avoiding the cross-contamination thanks to its disposable micro-syringes.
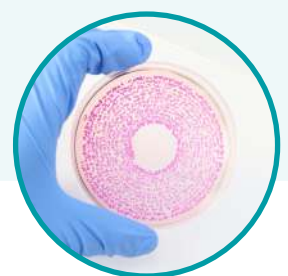
Purge cycles implemented

In order to remove air bubbles when sample liquid is driven into a microsyringe, purge cycles are implemented.
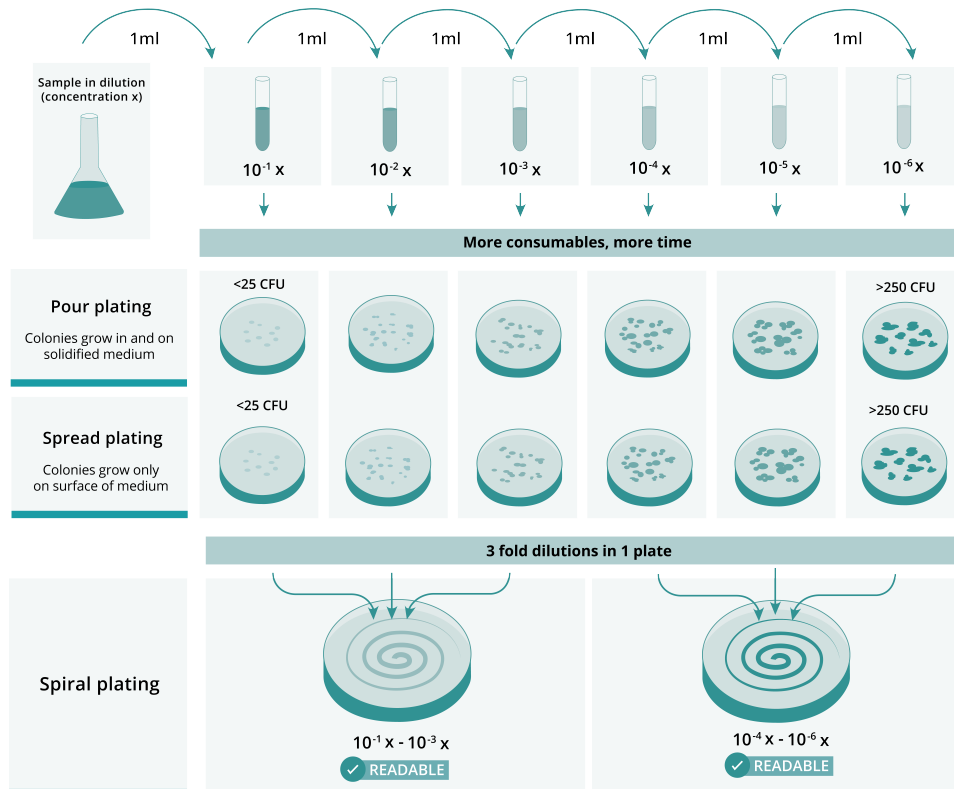
Efficiency

The time for a full cycle of plating is 30". Disposable syringes make desinfection unnecessary.

Threefold dilution and plating

Spiral plating is a two-in-one method: diluter and plater at the same time. Different concentrations of the sample are present in one plate and the time spent on colony count in shortened.

	1ml	1ml	1ml	1ml	1ml	1ml

Sample in dilution (concentration x)

	10^{-1} x	10^{-2} x	10^{-3} x	10^{-4} x	10^{-5} x	10^{-6} x

More consumables, more time

Pour plating
Colonies grow in and on solidified medium

<25 CFU .... >250 CFU

Spread plating
Colonies grow only on surface of medium

<25 CFU .... >250 CFU

3 fold dilutions in 1 plate

Spiral plating

10^{-1} x - 10^{-3} x ✓ READABLE

10^{-4} x - 10^{-6} x ✓ READABLE

Workflow

1 Eddy Jet 2W grabs a brand new sterile syringe.

2 The syringe takes the liquid sample from an irradiated sample beaker.
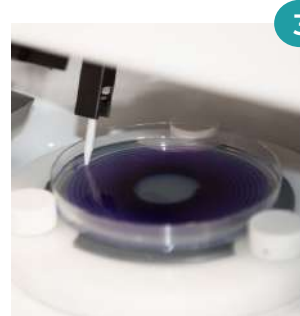
3 As the agar plate spins, the syringe automatically dispenses accurate volumes of sample.

4 Eddy Jet 2W gets rid of the sample-contaminated syringe.

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Technical specifications

Reproducibility	> 99%
Time for a full cycle	30 s (disposable syringes make disinfection unnecessary)
Spreading modes stored	25 spread modes (37 counting those for 150mm Petri plates)
Petri plate diameters	90 and 150 mm
Touch screen	7 in
Dimensions (WxHxD)	51.5 x 42 x 50 cm / 20.3 x 16.5 x 19.7 in
Weight	20 Kg / 44 lb.

Specifications subject to change without notice

Are you ready to go a step further?

Count your plates with IUL's technology.

DOT - Colony Counter

Easy and fast counting through the use of LED lighting and high-quality magnifying glass.

SphereFlash® - Automatic Colony Counter

Count colonies in only 2 seconds. Repeatable and highly accurate results even in challenging background.

Accessories and consumables

1. 1000 Y-irradiated Microsyringes
Cat. 90001780

2. 1000 Y-irradiated Sample Beakers
Cat. 90001790

3. Plate for 15 cm Petri Dishes
Cat. 90001715

4. Holder for sample beaker box
Cat. 90001949

5. Holder for Microsyringe box
Cat. 900011275

6. Sampling Holder for Beakers
Cat. 90001974

Ordering information

1. Eddy Jet 2W - Spiral plater
Cat. 90003800

For more information about
Eddy Jet 2W, scan the QR code

Colony counting & inhibition zone mesurement

Colony counters and inhibition zone readers

iUL

SphereFlash®
Automatic Colony Counter

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◤ Product Overview

The SphereFlash® is an Automatic Colony Counter that meets all the requirements of modern microbiology laboratories while **increasing its throughput.**

SphereFlash® is a one-size-fits-all solution that reads automatically different types of plates with the same instrument.
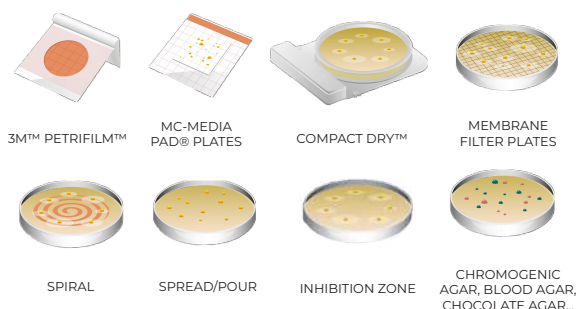
3M™ PETRIFILM™

MC-MEDIA PAD® PLATES

COMPACT DRY™

MEMBRANE FILTER PLATES

SPIRAL

SPREAD/POUR

INHIBITION ZONE

CHROMOGENIC AGAR, BLOOD AGAR, CHOCOLATE AGAR...

Patented spherical chamber

◤ Main benefits

Utmost accuracy

Its patented spherical chamber eliminates reflections in both colonies and Petri plates. This enables uniform illumination, and improved image capture for better, more reliable, and consistent results.

Wide range of colony counting

Easy & intuitive powerful software. Even the LITE version will detect a wide range of colony types with minimal or no user parametrization.

Audit Trail & User Management

SphereFlash® Colonies PRO & Halos PRO softwares comply with 21 CFR Part 11. Their security-relevant chronological set of records will provide documentary evidence of the sequence of activities that have affected a specific operation.

One-size-fits-all

A single device for all types of plates. The adapters and centering devices designed to fit various diameters enable to switch plate anytime.

Plate analysis

Easy and automatic generation of customized statistical reports including as many plates as needed.

High resolution

SphereFlash® is capable of detecting colonies of 0.3 mm using Colonies LITE Software and 0.046 mm using Colonies Pro Software.

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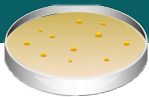### ▶ Software: Colonies LITE, Colonies PRO & Halos PRO

As we understand that resources are limited we designed the SphereFlash® with a small footprint and scalable software. Use only the features you need and add new capabilities as your lab work requires.

Count	CFU/ml	Count Vol
467	5.55E+003	0.842

SOFTWARE CHARACTERISTICS

INCLUDED

Colonies LITE

STANDARD METHODS

- Colony counting
- Automatic Calibration & Verification
- Report Generation
- Statistical Report
- Data export in PDF & CSV
- Images export in .PNG
- Designed for 100 mm, 90 mm, 60 mm (RODAC plates) and membrane filter plates
- Accessories available for 3M™, Petrifilm™, Compact Dry™ and MC-Media Pad® plates

Colonies LITE SW included with the SphereFlash® ⚙

UPGRADE ⌃

Colonies PRO

CREATE YOUR COLONY COUNTING METHODS

- Colony counting
- Automatic Calibration & Verification
- Colonies classification by color or size
- User Management
- Audit Trail available
- CFR21 Part 11 - Compliant
- LIMS Interface
- Report Generation
- Statistical report
- Data export in PDF & CSV
- Images export in .PNG
- Logo customization on the report
- Designed for 90 mm, 60 mm (RODAC plates) and membrane filter plates
- Accessories available for 3M™, Petrifilm™, Compact Dry™ and MC-Media Pad® plates
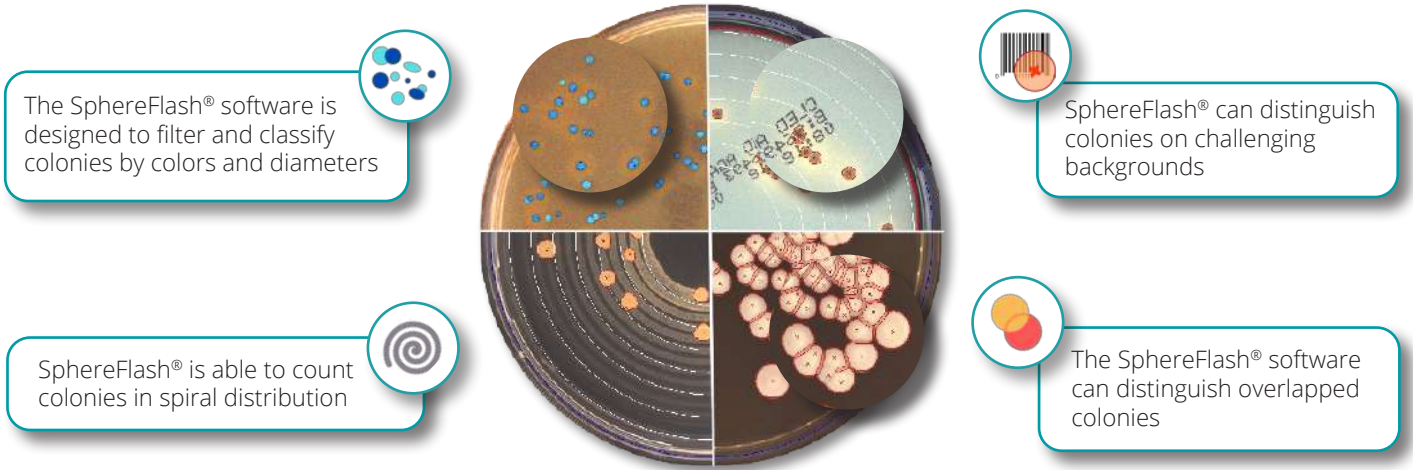
UPGRADE ⌃

Halos PRO

CREATE YOUR HALO MEASURING METHODS

- Inhibition Zones Measurement
- Antibiotic Potency Test according to the procedure of US Pharmacopoeia
- Automatic Calibration & Verification
- User Management
- Audit Trail available
- CFR21 Part 11 - Compliant
- LIMS Interface
- Report Generation
- Data export in PDF & CSV
- Images export in .PNG
- Logo customization on the report

Accuracy of counting

The SphereFlash® software is designed to filter and classify colonies by colors and diameters

SphereFlash® can distinguish colonies on challenging backgrounds

SphereFlash® is able to count colonies in spiral distribution

The SphereFlash® software can distinguish overlapped colonies

Workflow

1
Place the Petri Dish in the **centring device** of SphereFlash**®**.

2
Choose the method you want to apply according to your plate.

3
SphereFlash® **counts the colonies in 2 seconds.**

4
Obtain your report and print it in PDF.

Reflection-Free Illumination

The lighting is done through LEDs oriented to the internal wall of a moving spheric chamber and comes from above and/or below the chamber. The result is an unprecedented uniform and reflection-free illumination in the colony counter device.

The moving sphere automatically closes the chamber and prevents the area from any external light.

Technical data

Dimensions	288x220x371 mm (1.34x8.66x14.6 in)
Weight	5,5Kg (12.13 lb)
Computer Interface	USB 3.0 Type-A socket
Mains AC adapter Output	12V DC 3.43A
Power Range	90 ~ 264 VAC
Frequency Power	47 ~ 63Hz
Maximum Power	40W
Air temperature	15-30ºC (59-86ºF)
Frequency Range	50-60Hz

Specifications subject to change without notice

Computer requirements

*Computer not included

Microsoft Windows® 7, 8.1,10, 11 (x64 platforms).

1 free USB 3.0 Port.

8 GB of RAM memory.

100 MB of free disk space and 100 GB for the Database (for 5000 results stored with images).

FullHD screen (1920x1080) recommended

24" screen size recommended.

Microsoft Excel® 2007 or higher, 64 bits to open exported Excel® files.

A virtual PDF printer to create PDF reports.

Ensure your samples are prepared the best way for SphereFlash®

Eddy Jet 2W – Spiral plater

Eddy Jet 2W standardizes and streamlines plate inoculations with its patented cross-contamination-free technology.

Spin Air - Air Sampler

With its rotatory system, microorganisms stay on the plate in spiral homogeneously distributed in the Petri dish.

Accessories and spare parts

1. USB Super Cable 3.0
   Cat. 90001960
2. AC-DC Industrial Adaptor 12V
   Cat. 90004013
3. Verification disk for Halos
   Cat. 900011876
4. Verification disk for Colonies
   Cat. 90004113
5. Calibration disk
   Cat. 900010081
6. Pattern for 6 haloes (10 units)
   Cat. 90002131
7. Pattern for 4 haloes (10 units)
   Cat. 90002132
8. Centering device ~87-91 mm ø
   Cat. 900013473
9. Centering device 65-70 mm ø
   Cat. 900013513
10. Centering device 54-60 mm ø
    Cat. 900013512
11. Compact Dry™ adapter
    Cat. 900013524
12. Petrifilm™ adapter
    Cat. 900013525
13. MC-MEDIA® adapter
    Cat. 900013537

Ordering Information

1. SphereFlash® Colony Counter unit (includes Colonies LITE software)
   Cat. 90007000
2. Colonies PRO software
   Cat. 90007001
3. Haloes PRO software
   Cat. 90007002

For more information about
SphereFlash®, scan the QR code

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DOT
Manual Colony Counter

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◤ Main benefits

High Quality Magnification

The DOT Colony Counter has a large 120 mm diameter lens with a DINx2 magnification power.

Easy & comfortable

Colonies are counted by touching them directly with a stainless contact pointer or by marking them on the Petri dish with a clickable permanent marker.

Adaptable for any plate

Multiple adapters are available: 60 mm, 70 mm, 80 mm, 90 mm,100 mm, 120 mm, and 150 mm.

Traceability

Colony counts can be sent to any keyboard application running in a PC (Excel, Word, etc.).

Scalable lighting intensities

Bottom light with 4 selectable intensities and uper light (depending on the model).

◤ Product Overview

Counting colonies with the unaided eye is a slow, tedious, and sight-damaging task. IUL's colony counter makes this process easier and faster through the use of LED lighting and a high-quality magnifying glass. Any microbiology lab involved in colony counting will find this tool absolutely vital. Petri plates are placed in the colony counter where they are properly lit and magnified.

Operators can tick or point detected colonies, meanwhile a digital display increases the total count.

Technical specifications

MODEL	DOT 120 mm Magnifying Glass	DOT 100 mm Magnifying Glass
Dimensions (W×H×D)	211×395×320 mm / 8.3×15.55×12.6 in	211×355×320 mm / 8.3×13.98×12.6 in
Weight	3.2 kg / 7.0 lb	2.7 kg / 5.95 lb
Magnifying glasses	100 mm Ø	120 mm Ø
Upper Light	YES	NO
Bottom Light	4 selectable intensities	4 selectable intensities
Counter	4 digits, 9 mm LED-Display. Max. count 9999	4 digits, 9 mm LED-Display. Max. count 9999
Power Range	100/240 V	100/240 V
Frequency Range	50/60 Hz	50/60 Hz

Specifications subject to change without notice

Accessories and spare parts
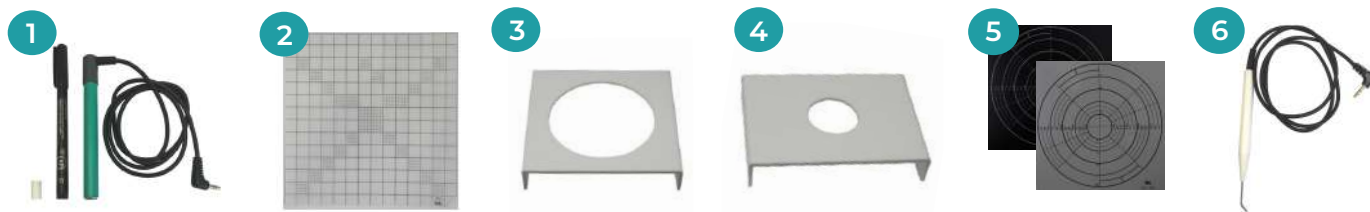
1. Clickable permanent marker
Cat. 900011459

2. Mixer Grid 1/16 cm^2
Cat. 9000613

3. 150 mm centering device
Cat. 9000615

4. 60 mm centering device
Cat. 9000606

5. Black or transparent Spiral Grid
Cat. 9000625

6. Stainless contact pointer
Cat. 900011460

Ordering information

1. DOT Colony Counter with 120 mm Magnifying Glass with Light
Cat. 90008700

2. DOT Colony Counter System with 100 mm Magnifying Glass without light
Cat. 90008701

For more information about
DOT, scan the QR code

iUL

Haloes Caliper
Zone Reader

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◤ Main benefits

High resolution

0.1 mm resolution
for accurate
measurements.

Free of parallax error

Its exclusive screen-lens
system avoids missing
the ends of the haloes
through its unique
perpendicular reading
technology.

Digital display

Results are clearly featured
in a digital display.

Plate verification

A standard set of disks
(10, 20 & 30 mm Ø) allows
to verify the device.

**Verification
disk included**

◤ Product Overview

Making a precise inhibition zone
measurement manually can be
challenging. The Haloes Caliper helps
to perform this in a simple and precise
way while avoiding parallax errors in
readings.

A precision rotating wheel accurately
measures the inhibition zones while
being manually spun. This comes in
handy in antibiotic susceptibility testing
and antibiotic potency measurements.

Workflow

1 Place the Petri Dish in the Haloes Caliper's **illuminated field.**

2 **Place** one side of the halo on the calibration line and **push the reset button.**

3 **Move the wheel** to the opposite side of the halo.

4 **Observe** the result on the **digital display.**

Verification disks

Use the 10, 20 & 30 mm disks to perform the verification of your Haloes Caliper

Technical specifications

Magnification	Factor 2.25
Measuring range	0–35 mm
Resolution	0.1 mm
Mains	100/240V 50/60Hz
Power	15W
Dimensions (W×D×H)	27×23×27 cm / 10.6×9.0×10.6 in
Weight	3 kg / 6.6 lb

Specifications subject to change without notice

Accessories and spare parts

1. Diameter verification disks (10, 20 & 30 mm)
Cat. 9000919

2. Pattern for 6 haloes (10 units)
Cat. 90002131

3. Pattern for 4 haloes (10 units)
Cat. 90002132

4. Millimiter grid
Cat. 9000985

Ordering information

1. Haloes Caliper inhibition zone reader unit
Cat. 9000900

For more information about
Haloes Caliper, scan the QR code

Air sampling

Air samplers

iUL

SPIN AIR
Air sampler

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◣ Product Overview

Microbial air contamination monitoring is a key process in facilities with special air cleanliness needs. Spin Air samplers give users a **compact, portable, simple solution to air sampling.**

IUL's air samplers are very compact and designed for easy transportation. **Sample anywhere, anytime!**

Traceability   Autoclave

Carrying case **INCLUDED! ***

*carrying case only included with Cat. 90005500

◣ Main benefits

Use 100% of the Petri Dish

IUL's **Spin technology enhances air sampling and microorganisms recovery** even when sampling in mid/ highly contaminated environments (particularly useful for GMP Grade C and D cleanrooms, and regular environment sampling).

This sampling technology uses 100% of the Petri plate agar surface to plate microorganisms (only 5% is used in other air samplers), **avoiding the use of colony count correction tables.**

Full traceability

LIMS friendly data records, printer connectivity, and barcode reader compatibility. All enable full sampling traceability.

Easy cleaning

The lid can be sterilized to avoid cross-contamination.

Regulatory compliance

Spin Air sampler allows complying with USP 797 & 1116 regulations.

### Easy sampling

These air samplers are compact and portable. They can be attached to a tripod for optimal sampling. If airflow problems arise, these are warned out by a noisy alarm and sampling is aborted. A handy countdown function avoids operator interference with results.

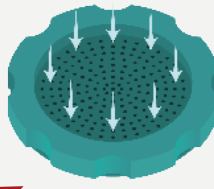Use the delayed activation mode to avoid the collector's contamination.

Available for 60 mm (Rodac) and 90 mm plates.
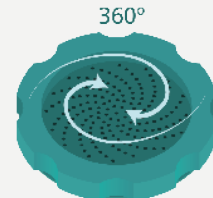
Spin Air technology

Competitor A	Competitor B	Spin Air IUL
		360°
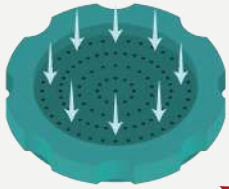
Competitor products have an aluminium lid design with a radial distribution of holes.

Only 5% of Petri plate is used

Spin Air has an innovative system that stands out from the rest. With its **rotatory system**, microorganisms stay on the plate in spiral **homogeneously distributed**.

Use 100% of the Petri plate!

Duplicate simultaneous testing with the Spin Air Mate

Connect the Spin Air Mate to the Spin Air and make them run synchronously.
The Spin Air Mate enables to use two types of agars: tryptic soy agar with polysorbate and lecithin (TSApl) for bacteria and malt extract agar (MEA) for fungi isolation. Recommended by the USP chapter <797>.

Calibration

The Spin Air is calibrated at factory and ready to use! The Spin Air warns the operator when a calibration is needed (after 2 years or 1 million liters of sampling).

Contact IUL or your IUL's distribuor, our trained professionals can help you around the world.

Sterilization

After each sampling, the lid can be sterilized with autoclave (inox and aluminium) in order to avoid any cross-contamination of the sample.

How Spin Air works

1 Preparation
Place the Petri dish and tighten the lid by screwing it on clockwise.

2 Starting
Click [⬆] to start the process.

3 Process
The rotative system distributes homogeneously the microorganisms.

4 Results
Loosen the lid by unscrewing it in a counterclockwise direction. Petri dish is ready for incubation.

Are you ready to go a step further?

Count your plates with IUL's technology.

DOT - Colony Counter
IUL's colony counter makes this process easier and faster through the use of LED lighting and a high quality magnifying glass.

SphereFlash® - Automatic Colony Counter
Count colonies in a simple and reliable way thanks to SphereFlash®, IUL's automatic colony counter.

www.iul-instruments.com

Table comparision from technical data

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Cat. 90005500

Cat. 90005532

Cat. 90005533

Cat. 90005502 **

MODEL	SPIN AIR	SPIN AIR BASIC	BASIC AIR		SPIN AIR MATE
Plates	60 mm (Rodac), 90 mm	60 mm (Rodac), 90 mm	60 mm (Rodac), 90 mm		60 mm (Rodac), 90 mm
Air flow	60-100 L/min	60-100 L/min	60-100 L/min		60-100 L/min
Air volume	from 10 to 9900 l	from 10 to 9900 l	from 10 to 9900 l		from 10 to 9900 l
Weight	1.7 kg / 3.74 lb	1.35 kg / 2.86 lb	1 kg / 2.2 lb		1.3 kg / 2.86 lb
Dimensions (WxHxD)	15x19x21.5 cm / 5.9x7.48x8.46 in	13x15.5x23 cm / 5.11x6.1x9.05 in	13x15.5x23 cm / 5.11x6.1x9.05 in		15x19x21.5 cm / 5.9x7.48x8.46 in
Sampling lid dimensions (øxH)	10.5x3 cm / 4.13x1.18 in	10.5x3 cm / 4.13x1.18 in	10.5x3 cm / 4.13x1.18 in		10.5x3 cm / 4.13x1.18 in
Power	12 V	12 V	12 V		12 V
Screen	LCD	LCD	LCD		LCD
Rotation system	YES	YES	NO		YES
Lid material (interchangeable)	aluminum	aluminum	plastic		aluminum
Traceability	YES	NO	NO		(with Spin Air)
Delayed activation code	YES	NO	NO		(with Spin Air)
Communication	RS-232 Standard	NO	NO		RS-232 Standard
Format communication	XML, CSV	NO	NO		XML, CSV
Allows to comply with	USP-797 / USP-1116	USP-797 / USP-1116	USP-797 / USP-1116		USP-797 / USP-1116
Barcode connection	YES	NO	NO		NO

Specifications subject to change without notice

Accessories and spare parts

1

2

3

4

5

1. Set for 90 mm Petri dishes (holder and lid)
Cat. **90005504** (aluminium)
Cat. **90005525** (plastic)
Cat. **90005527** (inox)

2. Set for 60 mm Rodac plates (holder and lid)
Cat. **90005505** (aluminium)
Cat. **90005526** (plastic)

3. Bar-code scanner
Cat. **90005701**

4. Communications Cable RS-232
Cat. **90005510**

5. Tripod with base
Cat. **90005511**
Cat. **900011099** (base)

6. Carrying case (included with Spin Air)
Cat. **900012094**

*carrying case only included with Spin Air model
**Spin Air Mate must be connected to Spin Air Master to operate

For more information about **Spin Air**, scan the QR code

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Staining

Slide stainer

IUL

POLY STAINER
Slide Stainer

Pharmaceutical | Food & Beverage | Environment | Cosmetics

◥ Main benefits

Walkaway Solution

Its one button operation triggers the entire staining procedure.

Unique Design

The Poly Stainer is designed to separate its staining area from the system's electronics and mechanics, this ensures durability due to separation from highly oxidative reagents.

Staining Protocol Optimization

Avoid cross-contamination by using the Poly Stainer's rinse well drain to keep rinse water clean. Accelerates stain preparation by drying out slides.

Open-System

Use any supplier's reagents and adapt the polystainer to your staining protocol.

◥ Product Overview

Automated slide staining is a must for labs that wish to increase their yield. The Poly Stainer performs standardized staining procedures that release lab staff from labor-intensive staining procedures.

General microbiology and histology labs that seek to **reduce sample staining workloads** will greatly benefit from its use.

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IUL's Poly Stainer is a fully-programmable robotic stainer that will take over the laborious task of slide staining. Keep a lab's footprint small without giving up on automating your lab workflow.

The importance of automating
the staining process in microbiology

Automation when carrying out a staining process in microbiology will lead to quicker and more precise results.

This is possible with the Poly Stainer, which allows you to program it to suit your needs.
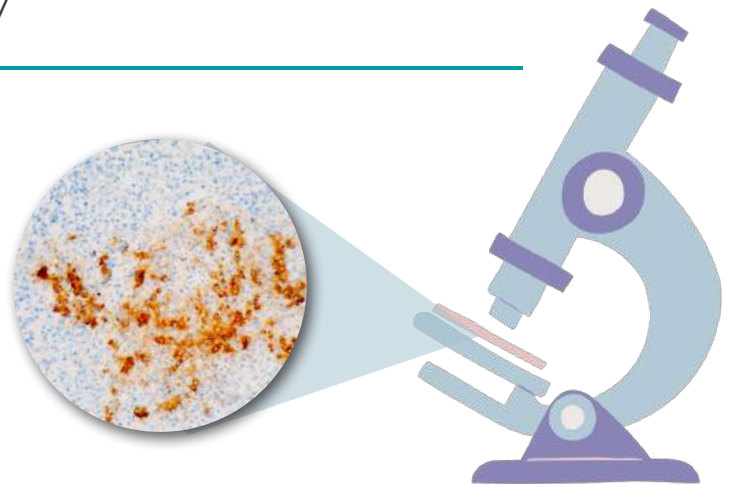
1
Avoid cross-contamination

The constant rinse cycle prevent cross-contamination, producing a standardized, clear stained film increasing **your lab productivity,** and providing standardized, **high quality results**.

2
Programmable

Memory **capacity of 10 programs**, each with 10 different positions. Most manual **staining processes can be automated** on the Poly Stainer.

3
Time-saving

Poly Stainer is perfect for a **wide range of staining procedures** since it is programmable, the run time is short, and the slides are ready for the microscope in just a few minutes.

Different types of staining

Poly Stainer

The Poly Stainer enables the automation of several staining techniques to obtain a sample according to your needs.

Examples of stainings
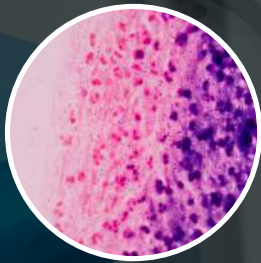
Gram Stain
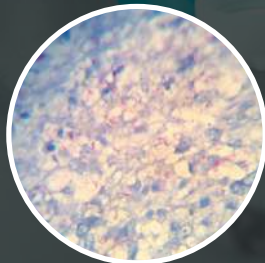
Acid fast
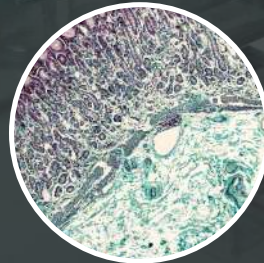
Trichrome
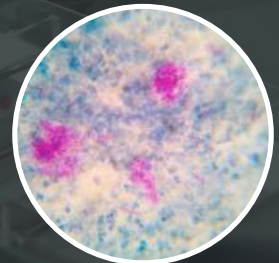
Ziehl-Neelsen

1

4 reagent containers

The four reagent wells in the system allow performing an extremely broad array of stains.

2

1 drying container

Speed up the stain preparation by drying out the slides.

3

1 wash container

The integrated water bath allows rinsing the samples.

![IUL logo]

Workflow

1

Place your slides in the basket (up to 20).

2

Click Run and walk away!

3

Collect your samples ready to be examined under the microscope.

Automize your lab work with IUL's products

Bring your workflow to the next level!

Eddy Jet 2W – Spiral plater

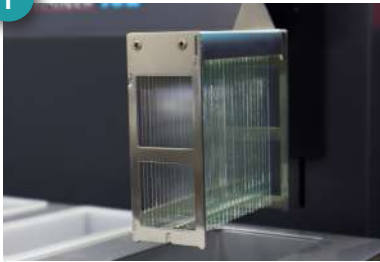Eddy Jet 2W standardizes and streamlines plate inoculations with its patented cross-contamination-free technology.

SphereFlash® - Automatic Colony Counter

Count colonies in a simple and reliable way thanks to **SphereFlash®**, IUL's automatic colony counter.

Technical data

Slides per basket	Up to 20
Reagent Containers	4
Drying Container	1 (12ºC-15ºC higher that the room temperature)
Rinsing container	1
Number of programs	Up to 10 – 10 steps per program
Dimensions (WxHxD)	700 x 440 x 400 mm
Weight	23 Kg

Specifications subject to change without notice

Accessories and spare parts

1. Container with cover
Cat. 90005418

2. Basket for slides
Cat. 90005316

3. Protective Cover
Cat. 900011135

4. Quick drain pump set
Cat. 900011846

Ordering Information

1. Poly Stainer, 220V, 120V, 100V
Cat. 90005100

For more information about
Poly Stainer, scan the QR code

![IUL logo]

Package size, weight, and dimensions

IULmicro Instruments

Package sizes and dimensions

Paddle blenders

MODEL	Reference	Power Supply	Qty/box	Box dimensions	Gross weight
For 400 ml bags					
Masticator Basic	9000470	220 / 240 V	1 pc.	60x42x40 cm	22,00 kg
Masticator Basic	9000471	110/127 V	1 pc.	60x42x40 cm	22,00 kg
Masticator Basic Panoramic	9000475	220/240 V	1 pc.	60x42x40 cm	22,00 kg
Masticator Basic Panoramic	9000477	110/127 V	1 pc.	60x42x40 cm	22,00 kg
Masticator Classic	9000400	220 / 240 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Classic	9000401	110/127 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Classic Panoramic	9000500	220/240 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Classic Panoramic	9000501	110/127 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Silver	9000420	220/230 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Silver	9000421	100 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Silver	9000461	110/120 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Silver Panoramic	9000520	220/230 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Silver Panoramic	9000521	100 V	1 pc.	60x42x40 cm	19,00 kg
Masticator Silver Panoramic	9000522	110/120 V	1 pc.	60x42x40 cm	19,00 kg
For 80 ml bags					
Masticator Compact	900085	220 / 230 V	1 pc.	29x37x27 cm	8,00 kg
Masticator Compact	900086	100 V	1 pc.	29x37x27 cm	8,00 kg
Masticator Compact	900087	110/120 V	1 pc.	29x37x27 cm	8,00 kg
For 3500 ml bags					
Maxicator	90002400	220/230 V	1 pallet	80x60x75 cm	64,00 kg
Maxicator	90002401	110 V	1 pallet	80x60x75 cm	64,00 kg

The delivery of above products includes 50 bags.

Gravimetric diluters

MODEL	Reference	No. of pumps	Diluent in	Qty/box	Box dimensions	Gross weight
Smart Dilutor W	90007900	1	Bottle	1 pc.	60x42x40 cm	10,50 kg
Smart Dilutor W	90007900BS	1	Bag	1 pc.	60x42x40 cm	9,50 kg
Smart Dilutor W	90007901	2	Bottles	1 pc.	60x42x40 cm	14,50 kg
Smart Dilutor W	90007901BS	2	Bags	1 pc.	60x42x40 cm	10,00 kg
Smart Dilutor W	90007901BB	2	Bottle & Bag	1 pc.	60x42x40 cm	12,00 kg

The bottle/s and/or the bag holder/s are included in each corresponding model

Sterile bags

Reference	Capacity volume	Filter	Packs of	Qty/box	Box dimensions	Gross weight
900014050	400 ml	No	50	500 pc.	30x40x21 cm	4,20 kg
90005421	400 ml	No	50	5000 pc.	58x47x40 cm	38,00 kg
900014501	400 ml	Yes	25	500 pc.	30x40x21 cm	5,10 kg
90002451	400 ml	Yes	25	2000 pc.	60x42x40 cm	20,00 kg
90002452	400 ml	Yes	25	5000 pc.	80x60x55 cm	50,00 kg
90002456	80 ml	No	50	2000 pc.	41x32x42 cm	5,00 kg
90002457	80 ml	No	50	6000 pc.	31x41x49 cm	15,00 kg
900014035	3500 ml	No	50	250 pc.	38x49x20 cm	7,00 kg

Bags are delivered sterilized with gamma-irradiation.

Spiral plater

MODEL	Reference	Qty/box	Box dimensions	Gross weight
Eddy Jet 2W	90003800	1 pallet	60x60x65 cm	32,00 kg

The delivery of above product includes 1000 disposable irradiated microsyringes (Cat. 90001780) and 1000 disposable irradiated beakers (Cat. 90001790).

Consumables	Reference	Qty/box	Box dimensions	Gross weight
Micro-syringes	90001780	1000 pc.	30x40x21 cm	2,00 kg
Sample beakers	90001790	1000 pc.	23x37x11 cm	1,10 kg

Automatic colony counter and inhibition zone reader

MODEL	Reference	Qty/box	Box dimensions	Gross weight
SphereFlash® LITE software	90007000	1 pc.	31x41x49 cm	8,00 kg
Optional Software				
Colonies Pro	90007001			
Halos Pro	90007002			

Digital colony counter

MODEL	Reference	Magnifying glass	Upper Light	Qty/box	Box dimensions	Gross weight
DOT	90008700	120 mm	Yes	1	30x40x21 cm	4,50 kg
DOT	90008701	100 mm	No	1	30x40x21 cm	32,00 kg

Digital inhibition zone reader

MODEL	Reference	Qty/box	Box dimensions	Gross weight
Haloes Caliper	9000900	1 pc.	60x42x40 cm	7,00 kg

Air samplers

MODEL	Reference	Head for 90 mm Petri dish			
Spin Air	90005500	Aluminum	1 pc.	38x40x20 cm	4,30 kg
Spin Air Basic	90005532	Aluminum	1 pc.	30x40x21 cm	2,90 kg
Basic Air	90005533	Plastic	1 pc.	30x40x21 cm	2,90 kg
Spin Air Mate*	90005502	Aluminum	1 pc.	38x40x20 cm	3,50 kg

*Spin Air Mate must be connected to Spin Air (Cat. 90005500) to operate.
The heads can be replaced for 60 mm plates.

Slide stainer

MODEL	Reference	Qty/box	Box dimensions	Gross weight
Poly Stainer	90005100	1 pallet	80x60x65 cm	32,00 kg

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For more information visit us at:

iul-instruments.com

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