

# protos<sup>3</sup>

## MICROBIOLOGY MADE EASY

Complete automated colony counting and chromogenic identification system



# PROTOS<sup>3</sup>

Microbiology made easy

Synbiosis is the manufacturer and supplier of the world's most popular automated colony counting systems. With over 25 years' experience, Synbiosis's colony counters are tried and trusted by microbiologists world-wide. Now, Synbiosis has used all their expertise to produce **Protos<sup>3</sup>**, a colony counter that not only counts but also automatically identifies species from colony colour.

Using its sensitive CCD camera and unique lighting coupled with powerful analysis software, **Protos<sup>3</sup>** counts your colonies in seconds and automatically identifies the microbial species on your chromogenic plates by their colour. This provides you with accurate, objective and fully traceable results.

The compact **Protos<sup>3</sup>** attaches via USB to your own computer, where you can input your plate's identification and with the one-click colony counting and chromogenic ID software you can rapidly analyse a wide range of plate types.

Common Chromogenic ID applications **Protos<sup>3</sup>** performs include identifying:

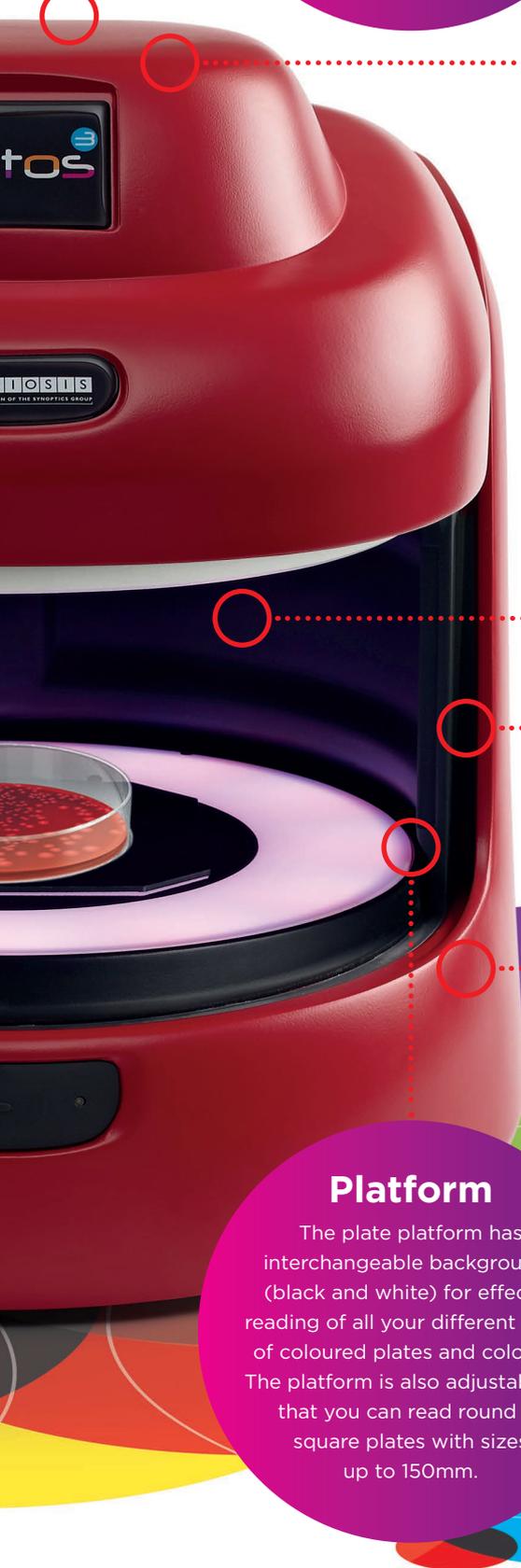
- *E. coli* (blue) and gram negative bacteria (white)
- Urinary tract pathogens such as *E. coli*, *Enterococcus spp.*, *Klebsiella spp.*, *Enterobacter spp.*, *Citrobacter spp.*, *Proteus spp.*
- *Candida albicans*

Common counting applications **Protos<sup>3</sup>** performs with ease include counting:

- *E. coli* on plate count agar
- *Enterococcus faecalis* on plate count agar
- *Salmonella spp.* on plate count agar
- *Staphylococcus aureus* on plate count agar
- Mixed organisms on plate count agar, Columbia blood agar or nutrient agar

The count results can be automatically transferred to Microsoft® Excel where the count, plate ID and images can be saved. This GLP compliant process, with its full audit trail eliminates transcription errors to provide you with accurate, objective data, which can be reviewed at any time and used to produce professional reports.





## Design

**Protos<sup>3</sup>** fits easily on a bench top and its stylish red colour makes it stand out in your lab. **Protos<sup>3</sup>** connects with ease to your computer via USB.

The intelligent design of **Protos<sup>3</sup>** makes it quick and simple to use.

## Camera

High resolution CCD camera captures true to life colour images and accurately detects and counts colonies as small as 43 microns.

## Lighting

Unique three channel (red, green, blue) LED lighting produces a colour composite image with excellent definition. This provides you with accurate colour images, allowing you to identify multiple different colours on one plate.

## Sliding doors

Two sliding doors can be positioned to eliminate external lighting and improve accuracy of counts with highly reflective agars.

## Platform

The plate platform has interchangeable backgrounds (black and white) for effective reading of all your different types of coloured plates and colonies. The platform is also adjustable so that you can read round or square plates with sizes up to 150mm.

## Software

**Protos<sup>3</sup>** comes with simple to use, automated counting and chromogenic ID software. The versatile software classifies colonies by size, colour and shape and can count colonies on pour, spiral, multi-sector, gridded, streak and dilution series plates. The software is so sophisticated that it can be 'trained' to exclude writing on your plates, sample debris or bubbles and marks colonies with symbols to show each one counted. The Chromogenic ID software uniquely automatically identifies species by colour, saving you time and making your results objective.

## FEATURES

Compact system with integrated CCD camera, lens and software

1.4m pixel scientific grade, high resolution CCD camera with f1.2 lens

Unique 3 channel (red, green, blue) LED lighting (patent pending)

Two sliding doors to prevent excessive ambient light

Chromogenic ID software

Counting software

Win8 compatible software

Automatically transfers results to Microsoft® Excel

SQL database stores all data and images

## BENEFITS

**Simple to set up and generate results with one click**

**Accurately detects, counts and identifies colonies as small as 43 microns**

**Even illumination for precise imaging**

**Easy to produce excellent results with reflective media and colonies**

**Improves accuracy and allows traceability**

**Increases throughput and improves accuracy by rapidly counting colonies using size, shape and colour**

**Versatile and easy to set up on many PCs**

**Improves data accuracy by eliminating keying and image transfer errors**

**Full traceability of GLP compliant results which can be accessed, printed and re-analysed at any time**

### **Synbiosis Europe and International Headquarters:**

Beacon House Nuffield Road  
Cambridge CB4 1TF UK  
Tel: +44 (0)1223 727125  
Fax: +44 (0)1223 727101  
email: sales@synbiosis.com

### **Synbiosis USA Headquarters:**

5108 Pegasus Court Suite L  
Frederick MD 21704 USA  
Tel: 800-686-4451/301-662-2863  
Fax: 301-631-3977  
email: ussales@synbiosis.com

**Website: [www.synbiosis.com](http://www.synbiosis.com)**



**Please refer to  
[www.synbiosis.com](http://www.synbiosis.com)  
for all ordering  
information**

A.025.03.15

All trademarks acknowledged