

PROTOCOL 3



ACCURATE, AUTOMATED COLONY
COUNTING AND ZONE
MEASUREMENT FOR ALL YOUR
MICROBIOLOGY APPLICATIONS.

Key Features

**"PROTOCOL 3
- A SOLUTION
FOR EVERY
MICROBIOLOGY
APPLICATION"**

Model	PROTOCOL 3
Design	Light-weight, ergonomic system with sliding doors
Camera	Integrated Camera: 1.4 megapixel CMOS with f1.5 lens
Dimensions (WxHxD) cm	45x50x40
Weight (kg)	20
Power Input (V)	100 - 240
Validation Documents	IQ/OQ/PQ Application specific validation plates

Flexible

Now in its third generation, the ProtoCOL 3 is a compact, automated powerhouse for all your colony counting and inhibition zone measurement application needs. With a range of software options and a UNISTAT statistics package, you can cost-effectively customise and upgrade your ProtoCOL 3 to suit your laboratory's needs.

Accurate

ProtoCOL 3 features unique three-colour lighting for unrivalled illumination of all colony and zone types. The system's high-resolution camera captures high-quality colour images, ensuring that you can generate precise, reproducible colony count and inhibition zone data.

Fast

At the press of a button, you can automatically read plates of up to 150mm in diameter to count colonies as small as 43um and measure zones with an accuracy of +/-0.5mm.

Traceable

ProtoCOL 3 is compatible with barcode readers. Results can be automatically exported into an Excel spreadsheet, OpenOffice, PDF, or transferred to your LIMS. All data is fully 21 CFR Part 11 compliant with audit trails and user access levels, making the ProtoCOL 3 suitable for any highly regulated microbiology laboratory.

System Features

Integrated Software

The ProtoCOL 3 comes with simple, user-friendly software, which can be customised to suit the needs of your application. All the data that you generate is 21 CFR Part 11 compliant with a full audit trail and is easily exported into Excel, OpenOffice or transferred to your LIMS.

High-Quality Camera

Our sensitive camera allows you to easily detect colonies as small as 43um and measure zones to an accuracy of +/-0.5mm. The ProtoCOL 3 comes with a 1.4-megapixel camera.

Unique Lighting

Using the patented three-colour LED lighting, your plate is imaged in red, green and blue with an automated self-calibration process ensures accurate colour definition with each image.

Versatile Platform

The sample platform has interchangeable backgrounds for using bright-field or dark-field exposures. The platform can read circular plates up to 150mm and square plates up to 120mm x 120mm. For plates larger than 150mm, please contact Synbiosis directly for further information on our custom solutions (sales@synbiosis.com).

Ergonomic Design

The lightweight and compact ProtoCOL 3 cabinet features two sliding doors to prevent excessive ambient light from affecting your image.

High Throughput

The ProtoCOL 3 is perfect for high throughput applications where you need to count colonies or measure zones rapidly and accurately. At the touch of a button, you can read up your plate in seconds, with results and images being instantly saved to your chosen location.



Application Modules

At the heart of every ProtoCOL 3 is a versatile software, which includes Pour Plate and Inhibition Zone Measurement modules as standard. To cost-effectively customise your system to your laboratory's needs you can add a range of other modules.



Standard Modules

Pour Plates

Counting colonies on pour, settle and spread plates. This method is for applications including microbial limit testing, total viable counts, and pour plate dilution series. You can also count colonies on membranes such as bioburden testing.

Inhibition Zone Measurement

You can measure the diameter of inhibition zones for applications, including Single Radial Immunodiffusion (SRD) plates and combine them with UNISTAT to determine vaccine potency.



Optional Modules

Antibiotic Susceptibility Testing

Measuring zones on antibiotic susceptibility testing (AST) plates and then comparing results to data in the eAST software containing breakpoint values from EUCAST or CLSI databases to automatically determine sensitivity or resistance.

Chromogenic ID

Chromogenic ID allows you to automatically identify microbes on chromogenic agar from many of the major media suppliers.

Spiral Plate

You can read spiral plates generated from all major spiral plater manufacturers to generate CFU/ml results automatically.

Multiwell

This enables you to count colonies within individual wells of multi-well plates.

Minimum Inhibition Concentration

This method allows you to automatically read zones around MIC strips on agar plates to determine your antibiotic's MIC breakpoint value.

AMES Testing

To determine the mutagenic activity of different chemicals, you can count colonies and automatically compare plate results.

Serum Bactericidal Assay

You can count colonies on SBA plates to determine the efficacy of specific bacterial vaccines.

Opsonophagocytic Killing Assay

You can count colonies on OPKA assay plates to assess the potency of various viral vaccines automatically.

Multi-Sector

You can count colonies on plates divided into different sections, making this module ideal for air monitoring plates.



Providing innovative imaging and analysis systems for the microbiological process



About Synbiosis

Synbiosis is part of the Synoptics family, with over 35 years of experience designing and producing scientific instruments based on digital imaging technology.

At Synbiosis, we are passionate about making colony counting and zone analysis easier. That's why we have developed products specifically designed to automate colony counting and inhibition zone measurement to relieve you of the tedium involved with these repetitive manual tasks.

Our unique, ground-breaking technologies and practical experience have been applied to various companies' needs, from pharma to microbiology. We want to partner with companies requiring unique versions of our existing products or completely new designs. If you have a challenge for us, book a demo!



**Beacon House,
Nuffield Road,
Cambridge,
CB4 1TF,
UK**



01223 727100



sales@synbiosis.com



www.synbiosis.com

