

*BioTek

Designed for one purpose: microbial growth curve analysis



A part of **Agilent**

LogPhase600 Assay App - Bacteria test with new

TIMEPOINT



The LogPhase 600 Microbiology Reader is in a class of its own, designed for measuring microbial growth curves in up to four standard 96-well microplates at a time. It features purpose-built, robust shaking and consistent temperature control, which are critical to optimal bacteria and yeast cell growth and ensure the best data quality. The LogPhase 600 is controlled with an App to acquire data and perform microbiology-focused analysis for all plates.

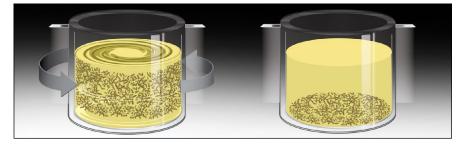


Only 4-plate microplate reader on the market



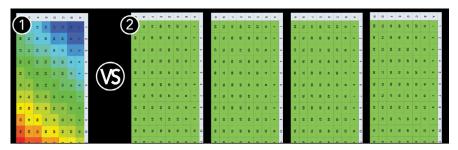
LogPhase 600 is the only 4-plate microplate reader on the market. You no longer need multiple instruments, multiple PC's and a vast amount of bench space for your microbial growth assays.

Keep your cells in suspension for optimal growth



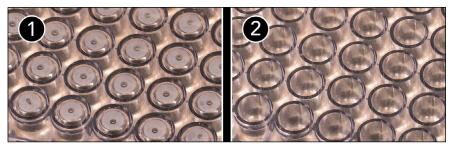
The shaking mechanism in LogPhase 600 is specifically designed for microbial growth assays; its robust and superior shaking ensures that your cells will not settle, even during long term kinetic assays.

Optimized incubation



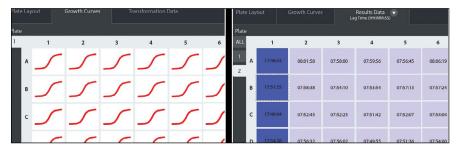
Consistent temperature control is essential to successful microbial growth assays. Incubation in the LogPhase 600 is controlled by several sensors to ensure even heating throughout, without edge effect or evaporation. Incubation can be inconsistent in some microplate readers (1). LogPhase 600 ensures consistent inter- and intra-plate heating (2).

Condensation Control



Condensation Control[™] sets a temperature gradient from top to bottom to prevent condensation on the sealed plates that can cause light scatter and reading artifacts. (1) Condensation on plate seals can cause inaccurate and inconsistent measurements. (2) Condensation Control in the LogPhase 600 prevents condensation, enabling consistent data collection throughout the kinetic run.

Consistent growth conditions = consistent data



LogPhase 600 provides the most consistent growth conditions for microbial growth assays on the market. Other "all-purpose" systems cannot provide the same consistency in growth and results.

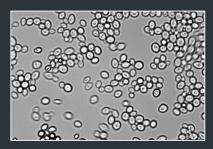
Targeted, powerful and easy-to-use app

▲ TEMPERATURE	Heating to 37 °C	Plate Layout Growth Curves	м	Results Data ax Rate (OD/min)		_	
C-t D-i-t		Plate 1 1 2	3	4 5	Well	A1	B1
Set Point 37 ▼ °C Gradient √ ON OFF		* <i>S</i> S	<u>_</u> _	55	Name	Control	Sample2
		• <i>S S</i>	<u>_</u> _	55	Lag Time	0:21:43	0:29:40
▲ SHAKING	800		<u>_</u>	$\int \int \int dx$	Max Rate (OD/min)	1.41E-04	1.66E-04
▲ TOTAL DURATION	8 hrs		ייג גר	5	Stationary Phase	1:59:56	2:02:35

The LogPhase 600 App has an easy-to-use interface with analysis tools designed for microbial growth researchers. New users can be up and running in minutes with very little training. Multi-plate data can be viewed on the screen at the same time. The app automatically calculates lag time, maximum rate (OD/min) and time to stationary phase.

A P P L I C A T I O N S

Yeast growth assays



Yeast can grow rapidly, and is amenable to genetic and biological procedures, making it a common model system for research in cell biology. Kinetic measurement and growth curve analysis are automated with LogPhase 600.

Bacterial growth assays



LogPhase 600 provides an easy-toimplement solution for labs that wish to increase throughput while streamlining the typical bacterial growth and metabolism study workflows.

Biofuels research



Monitoring the growth of microbes is critical to many biofuels research methods. The 4-plate capacity in LogPhase 600 increases the throughput compared to standard microplate readers.

Antimicrobial resistance



The consistent environmental conditions within LogPhase 600 enable scientists to observe bacterial growth curves as part of antimicrobial resistance assays. The four plate capacity enables higher throughput than other systems.

Food and beverage testing



The multi-plate capacity, robust shaking and incubation make LogPhase 600 an ideal platform for food and beverage testing methods.

Algal research



The growth of photosynthetic organisms like algae is easily detected in microplates by light scattering methods at OD 600.



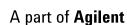
microbiology reader

TECHNICAL DETAILS

General			
Detection modes	Absorbance		
Microplate types	96-well microplates		
Microplate capacity	4-microplate capacity		
Temperature control	Incubation to 45 °C with Condensation Control [™] Variation ±0.5 °C at 37 °C Plate to plate uniformity ±0.5 °C at 37 °C		
Shaking	Orbital, user-selectable velocity		
Software	LogPhase App included; provides reader control, data collection and analysis.		
Absorbance			
Light source	LED		
Detector	2 photodiodes (measurement & reference)		
Wavelength range	560 nm – 640 nm, configuration dependent		
Dynamic range	0 - 4.0 OD		
Resolution	0.001 OD		
Reading speed	Reading speed: <60 sec per plate Minimum kinetic interval: 2 min 30 sec (<60 sec read time; 90 sec shake) per plate		
Physical characteristics			
Power	24 VDC power supply compatible with 100-240 volts AC @50-60Hz, 250W (minimum)		
Dimensions	10.5" H x 26.0" W x 16.0" D (26.7 x 66 x 40.6 cm)		
Weight	50 lbs (22.7 kg)		
Regulatory			
Regulatory	CE and TUV marked. RoHS compliant.		







BioTek Instruments, Inc. Phone: (802) 655-4040 • Toll-Free: (888) 451-5171 • Outside the USA: (802) 655-4740 www.biotek.com

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