

# Agilent BioTek 800 TS Absorbance Reader

## Product description



The Agilent BioTek 800 TS absorbance reader is an affordable, high-quality microplate reader for assays in 6- to 384-well formats. The color touchscreen provides a visual user interface, making programming simple. The onboard software includes “quick read” and custom protocols, with data viewed immediately after measure, followed by export to USB or to the compact printer. The software stores a history of programmed assays and recent plate readings for instant recall. The 800 TS can be configured to include temperature control and shaking, ideal for assays like short- or long-term kinetics, enabled under computer control via Agilent BioTek Gen6 data analysis software. The 800 TS, used alongside the Agilent BioTek 50 TS washer, makes an affordable system to automate many application workflows, including immunoassays, cytotoxicity, enzyme assays, cell-based assays and more.



**Figure 1.** The Agilent BioTek 800 TS absorbance reader can be controlled by the Agilent BioTek Gen6 data analysis software for extensive data analysis.

## Features

- Versatile for many applications, including ELISA, protein and other end point assays, plus kinetics and cell-based assays
- Color touchscreen for quick programming and simple operation
- USB flash drive for convenient data export, Gen6 import for analysis
- High precision and accuracy for reliable results

## Typical applications

- ELISA
- Protein assays
- Cytotoxicity assays
- Kinetic ELISA

## Configurations

- 800TS: 6- to 96-well plates, 400 to 750 nm detection, shaking
- 800TSI: 6- to 96-well plates, 400 to 750 nm detection, temperature control and shaking
- 800TSUV: 6- to 96-well plates, 340 to 750 nm detection, shaking
- 800TSUVI: 6- to 96-well plates, 340 to 750 nm detection, temperature control and shaking
- 800TSNB: 6- to 384-well plates, 400 to 750 nm detection

## Optional accessories

- Gen5 microplate reader and imager software
- Gen5 Secure software (for 21 CFR Part 11 Compliance)
- Absorbance test plate
- Product qualification package
- Printer



**Figure 2.** The Agilent BioTek 800 TS reader is ideal for pairing with the Agilent BioTek 50 TS washer for routine workflows.

## Technical details

General		
Detection Modes	Absorbance	
Read Methods	End point, kinetic, well-area scanning (under computer control)	
Microplate Types	6- to 384-well plates	
Temperature Control	To 50 °C ("I" configuration)	
Shaking	Yes (except 800TSNB)	
Read Speed	11 secs /96 wells (sweep mode)	
Software	Agilent BioTek Gen6 data analysis software included Agilent BioTek Gen5, Gen5 Secure (optional)	
Absorbance		
Light Source	Tungsten halogen	
Wavelength Selection	Filters	
Wavelength Range	400 – 750 nm 340 – 750 nm ("UV" configurations)	
Dynamic Range	0 to 4.0 OD (normal and rapid read modes) 0 to 3.0 OD (sweep read mode)	
Resolution	0.001 OD (standalone mode) 0.0001 OD (via PC software control)	
Filter Wheel Capacity	5 positions	
Filters Supplied	405, 450, 490, 630 340, 405, 450, 490, 630 ("UV" configurations)	
Optical Density (OD)		
Accuracy (96-well)	Normal read mode	± 1.0% ± 0.010 OD from 0.000 to 2.000 OD @ 405 nm ± 2.0% ± 0.010 OD from 0.000 to 2.000 OD @ 340 nm
	Rapid read mode	± 2.0% ± 0.020 OD from 0.000 to 2.000 OD @ 405 nm ± 2.5% ± 0.020 OD from 0.000 to 2.000 OD @ 340 nm
	Sweep read mode	± 1.0% ± 0.020 OD from 0.000 to 1.000 OD @ 405 nm
Linearity (96-well)	Normal read mode	± 1.0% ± 0.010 OD from 0.000 to 2.000 OD @ 405 nm ± 3.0% ± 0.010 OD from 2.000 to 3.000 OD @ 450 nm ± 2.5% ± 0.010 OD from 0.000 to 2.000 OD @ 340 nm
	Rapid read mode	± 2.0% ± 0.010 OD from 0.000 to 2.000 OD @ 405 nm ± 2.5% ± 0.010 OD from 0.000 to 2.000 OD @ 340 nm
	Sweep read mode	± 1.0% ± 0.010 OD from 0.000 to 1.000 OD @ 405 nm ± 1.0% ± 0.010 OD from 0.000 to 1.000 OD @ 340 nm
Repeatability (96-well)	Normal read mode	± 0.5% ± 0.005 OD from 0.000 to 2.000 OD @ 405 nm ± 1.5% ± 0.005 OD from 0.000 to 2.000 OD @ 340 nm
	Rapid read mode	± 1.0% ± 0.010 OD from 0.000 to 2.000 OD @ 405 nm ± 2.0% ± 0.020 OD from 0.000 to 2.000 OD @ 340 nm
	Sweep read mode	± 2.0% ± 0.020 OD from 0.000 to 1.000 OD @ 405 nm
Physical characteristics		
Power	External 24 V DC power supply compatible with 100-240 V AC @ 50-60 Hz. Power consumption: 40 Watts; 150 Watts for incubated configurations	
Weight	< 22 lbs (9.97 kg)	
Dimensions	16.5" D x 15" W x 7" H (41.9 x 38.1 x 17.8 cm)	
Connectivity	1 USB port for computer control, 1 USB port for printer	

[www.agilent.com/lifesciences/biotek](http://www.agilent.com/lifesciences/biotek)

DE15734983

This information is subject to change without notice.

© Agilent Technologies, Inc. 2022  
Printed in the USA, March 15, 2022  
5994-2748EN

