

You've got 3.5 seconds

NanoPhotometer® C40

Cuvette Spectroscopy



Cuvette Capability

Compatible with most quartz, glass, and plastic cuvettes
Linear up to 2.6 Abs



Full Scan

3.5 seconds per reading
200 to 900 nm
Resolution better than 1.8 nm



Certainty in Real Time and IQ/OQ Package

Blank Control™, air bubble and impurity recognition
Compliant with international standards in regulated environments



WiFi

HotSpot

LAN



Endless Connectivity

Built-in File Server for data access from Windows and Mac computers
Print to Airprint™ and HP Universal Driver compatible printers as well as DYMO Label printers
Rest API for LIMS integration



Battery Powered

Up to 10 hours battery operation



Flexible Unit Control and Ultimate Data Security

Computer (Windows & Mac)
Built-in touchscreen
Smartphone / Tablet (Android OS & iOS)
Proprietary NPOS immune to known threats

World's smallest footprint in its class: only 20 x 20 x 12 cm
Ideal for nucleic acids, protein and samples in most organic solvents
Upgradable to microvolume capability
No reconditioning, no recalibration and no regular maintenance ever
Stand-alone operation with built-in 7 inch glove compatible touch screen
Universal data output: Excel and PDF
Multi Language User Interface
Barcode ready
32 GB of onboard memory

Technical Specifications

NanoVolume Performance		Zero Stability	±0.003 A/hour after 20 min warm up @ 280 nm
Detection Range dsDNA	1 ng/μl to 16,500 ng/μl (N50: 5 ng/μl to 7,500 ng/μl)	Noise	0.002 A rms at 0 A @ 280 nm 0.002 A (pk to pk) at 0 A @ 280 nm
Detection Range BSA	0.03 mg/ml to 478 mg/ml (N50: 0.15 mg/ml to 217 mg/ml)	Optical Arrangement	1 x 3648 CCD Array (N50: 1 x 1024 CCD Array)
Minimum Sample Size	0.3 μl	Lamp	Xenon flash lamp
Photometric Range (10 mm equivalent)	0.02 - 330 A (N50: 0.1 - 150 A)	Lifetime	10 ⁹ flashes, up to 10 years
Path Length	0.67 and 0.07 mm	Processing Power & Compatibility	
Dilution Factor	15 and 140	Operating System	Linux based NPOS
Vortexer	2,800 rpm; tube size up to 2.0 ml	Onboard Processor	Quad Core 1 GHz
Cuvette Performance		Internal Storage	32 GB
Detection Range dsDNA	0.1 ng/μl to 130 ng/μl	Control Options	Onboard with built-in Touchscreen, Computer, Smartphone and Tablet
Detection Range BSA	0.003 mg/ml to 3.7 mg/ml	Software Compatibility	Windows 7, 8, 10 (32 & 64 bit), OS X, iOS & Android OS
Photometric Range	0 - 2.6 A	Min. Requirement Smartphone/Tablet	4" screen; Apple: iPad 2, iPhone5 & iOS 6; Android Phone: OS version 4.4; Android Tablet: OS version 5.0, Quadcore 1.2 GHz with 1 GB RAM
Center Height (Z-Height)	8.5 mm	General Specifications	
Cell Types	Outside dimension 12.5 x 12.5 mm	Main Body Size	20 cm x 20 cm x 12 cm
Heating	37 °C ± 0.5 °C	Weight	3.8 - 5.2 kg depending on configuration
Optical Specifications		Operating Voltage	90 - 250 V, 50/60 Hz, 60 W (90 W with battery pack), 18/19 VDC
Wavelength Scan Range	200 - 900 nm (N50: 200 - 650 nm)	Display	1024 x 600 pixels; Touchscreen glove compatible
Measure Time For Full Scan Range	3.5 - 6.0 seconds	Built-in Battery Pack	Optional rechargeable lithium ion battery; 95 Wh, 6.6 Ah; Operation time: up to 10 h; min. charging cycles: 800
Wavelength Reproducibility	± 0.2 nm (N50: ± 1 nm)	Certification	CE, IEC 61010-1:2012 and EN 61326-1:2013
Wavelength Accuracy	± 0.75 nm (N50: 1.5 nm)	Battery Certification	IEC 62133 and UN38.3 transport test
Bandwidth	better than 1.8 nm (N50: 5 nm)	In & Output Ports	2x USB A, USB B, HDMI, Ethernet, WLAN
Stray Light	< 0.5 % at 240 nm using NaI (N50: < 2 %) and < 1 % at 280 nm using Acetone (N50: < 2 %)	Additional Data Input	Mouse & keyboard options
Absorbance Reproducibility	< 0.002 A (0.67 mm path) @ 280 nm (N50: < 0.004 A (0.67 mm path) @ 280 nm)	Security	Slot for Kensington lock
Absorbance Accuracy	< 1.75 % @ 0.7 A (0.67 mm path) @ 280 nm of the reading		

Features and specifications are subject to change without notice.

Reviews

“Great accuracy of measurements, easy usage, really nice interface. ”

Rating: 5.0 ★★★★★

Application Area: Determination of the concentration of proteins and nucleic acids solutions

"C40 NanoPhotometer is a **great tool** to measure macromolecule concentrations in microvolumes. It surpasses our previous nanodrop machine as it does not need calibration and has more functions. **Easy interface** is a great advantage and the new function of **enzyme kinetics** together with **vortex** makes this small and handy tool a **multitask help in our lab**. The wi-fi functions enables us to print spectra quickly. Measurements are **repeatable and accurate**. I would recommend the equipment every biochemistry lab."

Joanna Sliwiak

Organization: Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan, Poland

“Excellent”

Rating: 5.0 ★★★★★

Application Area: Biotechnology

"Easy to use. Excellent **quality** and data is **very reliable**."

Vineeta Ranjan

Organization: Neobiotechnologies, Inc.