

# Colibri Microvolume Spectrometer

For DNA, RNA, Protein and More.



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**Imagine the speed and precision of a hummingbird, a rock solid optomechanical setup, and everything inside of a tiny housing – this is Colibri.**

Colibri is only 16,5 cm wide

### **Smallest Sample Volumes**

Even the smallest samples can be easily pipetted into the measurement position. The hydrophobic ring facilitates sample placement. After measurement, the sample can be wiped off or recovered.

### **High Dynamic Range**

The optical pathlength can be set to 0,2 or 1 mm. A motor positions the sample chamber to the chosen pathlength with highest precision. For some protocols, the instrument can be set to automatically select the best pathlength.

### **Precise, Reproducible Measurement.**

The compressed sample is surrounded by inert materials. This eliminates evaporation of the free liquid column, which means there will be no increase of concentration and false results. Unlike conventional instruments, the surfaces do not require frequent reconditioning.

### **Intuitive Touchscreen Operation**

In addition to the intuitive color touchscreen interface, entries can be made on softkeys, or on the optional computer mouse or even a separate computer keyboard, depending on the user's preference.

### **Instant Setup**

Turn on Colibri and you are ready to go. No extra PC, cuvette, or loose parts are required, and there is nothing to be connected.

### **Software**

*Colibri offers a comprehensive on-board software package:*

Measurement data is organized and saved according to the project and can be retrieved at any time. With a 2 GB internal memory, this capacity will last for the life of the instrument. Samples can be named individually or automatically for later identification and reporting.

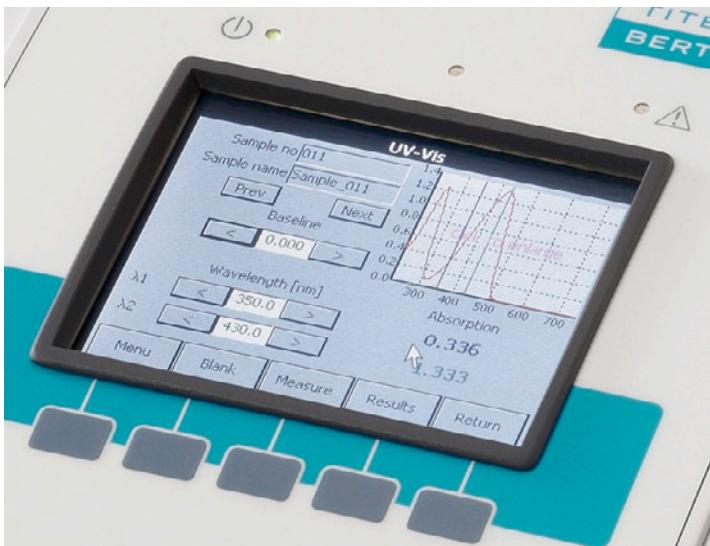
Reports are available on a printer or as CSV files. The printout is 112 mm wide, allowing for a layout in a convenient format. Alternatively, reports can be saved on a USB memory stick for further processing on a lab computer.

For measurement and calculation of concentrations, up to 9 preset protocols are available. Whereas DNA or RNA measurements do not require much calculation, protein measurements represent a wide field. Five protocol types take care of all known requirements, such as measurement at 280 nm, Bradford and Lowry methods, different dye labels and many more. Stand curve calculations include point-to-point, polynomial, sigmoid and exponential curves. For UV-VIS spectral measurement, a separate protocol is available.

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1 Optical-grade mirror behind sapphire glass 2 Permanent hydrophobic coating for easy sample placement

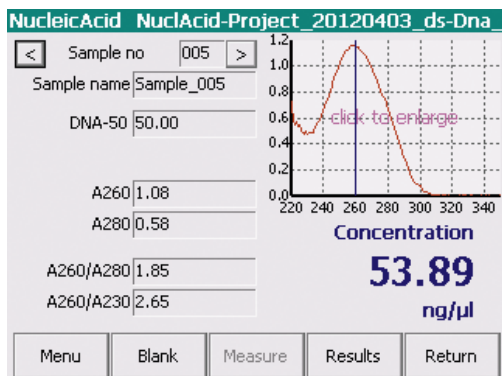


Powerful onboard software



Onboard computer, color touchscreen

# Colibri Technical Data



Numerical and graphical measurement results on one screen.



Comprehensive report, convenient printout format.

## Performance Data

<b>Sample Volume</b>	1–5 $\mu$ l
<b>Sensitivity dsDNA</b>	2–3700 ng/ $\mu$ l

## System Properties

<b>Standalone Operation</b>	Built-in software
<b>User Interaction</b>	Touchscreen and softkeys
<b>Protocols</b>	Nucleid Acid, Protein, Cell Lysate, UV-VIS
<b>Report</b>	Wide 112 mm printout with data and graph
<b>Display</b>	3.7" color touchscreen
<b>Interfaces</b>	3 USB ports
<b>Additional Data Input</b>	Mouse and keypad options
<b>Data Export</b>	By USB memory stick, CSV format, data and graph

## Optical Specifications

<b>Pathlength</b>	0.2 mm and 1 mm, autoselect function
<b>Wavelength Range</b>	200–850 nm
<b>Lamp</b>	Xenon Flashlamp
<b>Detector</b>	2048 pixel array
<b>Wavelength Accuracy</b>	< 1 nm
<b>Wavelength Resolution</b>	3 nm
<b>Photometric Range</b>	0.02–75 OD (10mm equivalent absorbance)
<b>Photometric Accuracy</b>	< 2% at 1.0 OD/ 430 nm

## General specifications

<b>Dimensions</b>	26.5 x 16.5 x 13.4 cm
<b>Weight</b>	2.5 kg
<b>Power</b>	Power supply, input 100–240 V AC, output 12V, min. 2.5 A DC (included)
<b>Printer</b>	External printer (optional)

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