LAMBDA Bio and Bio+ Spectrophotometers

It's not just a UV/Vis.
It's a LAMBDA.

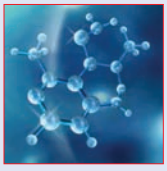
The Bio-calculator – with the heart of a LAMBDA.

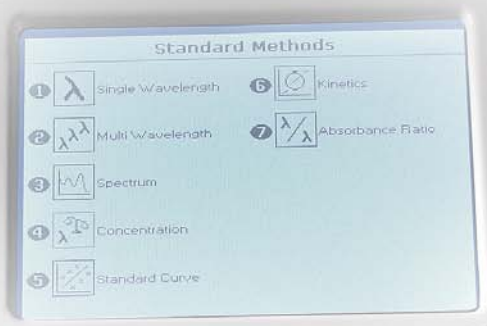
Introducing the PerkinElmer® LAMBDA™ Bio and Bio+ – personal UV/Vis spectrophotometers for all your routine life-science calculations. Continuing on our tradition of providing you with quality UV/Vis instruments for more than 60 years, these low-cost spectrophotometers have been designed to acquire and calculate results in a matter of seconds. With the same complexity as a desktop calculator, the LAMBDA Bio and Bio+ have a series of pre-programmed methods to support the demands of both molecular biology and biotech laboratories:

- DNA, RNA, concentration and purity, and Oligonucleotide methods
- Protein methods including: Direct UV, BCA, Bradford, Lowry, Buiret and Cell density measurements
- Curve fitting with up to 9 standards in triplicate assures accurate results

Performance that wow's the crowd and the finance people.

With it's large LCD screen and full scanning capabilities, the LAMBDA Bio is a crowd pleaser. Built to last, easy to use and even easier to own. No moving parts, virtually no maintenance and no consumables make the LAMBDA Bio the perfect tool when the instrument just needs to work, day-in and day-out. Rely on the LAMBDA Bio. It's the smart choice for your laboratory in any application from teaching – where operator training may be an issue, to the most advanced R&D laboratory – where precious samples need to be processed right, the first time. The LAMBDA Bio will win the hearts and minds of anyone working with it. After all, it is a LAMBDA.





Speed, stability and confidence!

Order online at www.perkinelmer.com/lambdabio

PerkinElmer®
precisely.

designed to make

spectrophotometry easier

You don't need an impressive budget, to have an impressive instrument

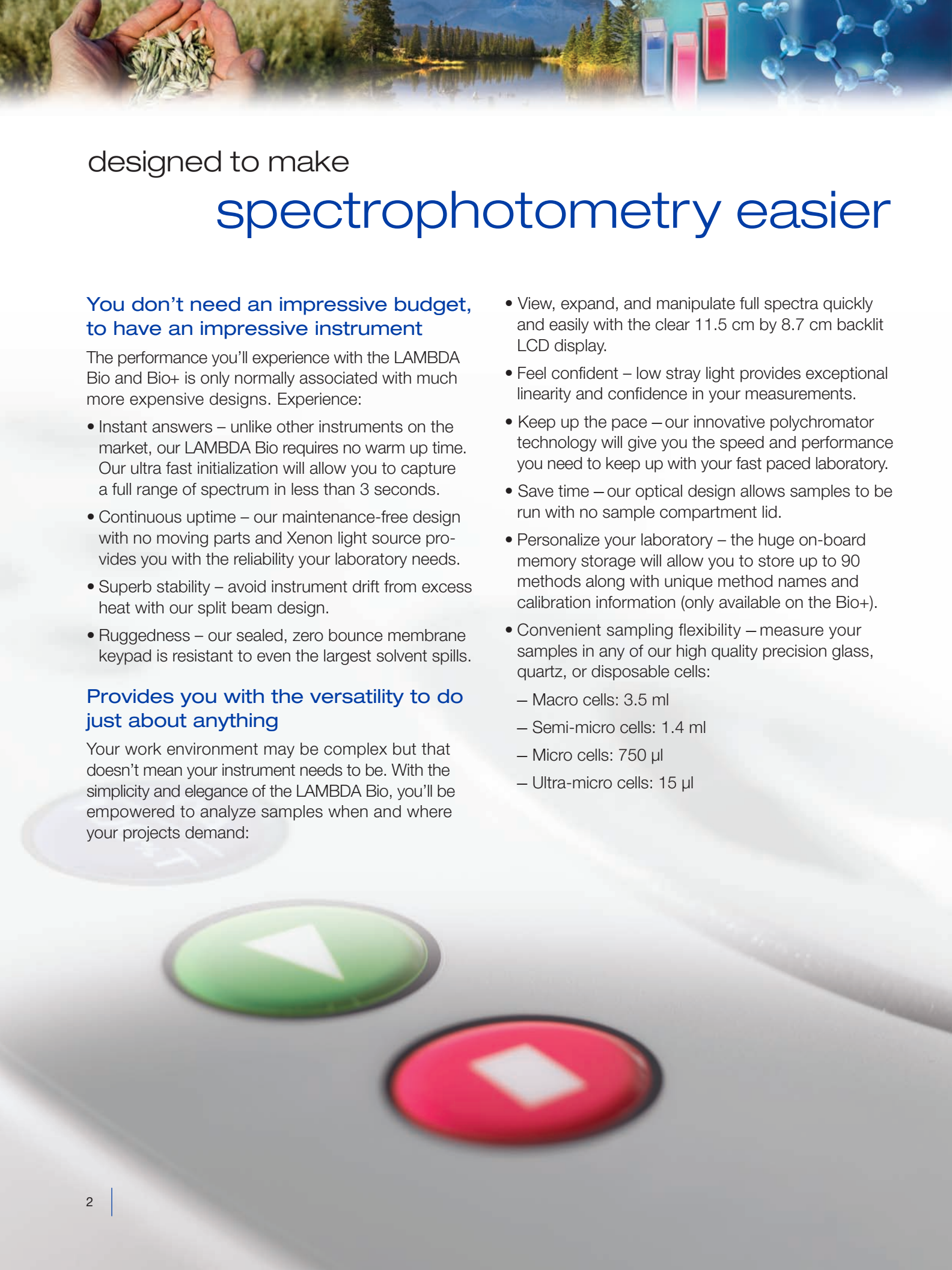
The performance you'll experience with the LAMBDA Bio and Bio+ is only normally associated with much more expensive designs. Experience:

- Instant answers – unlike other instruments on the market, our LAMBDA Bio requires no warm up time. Our ultra fast initialization will allow you to capture a full range of spectrum in less than 3 seconds.
- Continuous uptime – our maintenance-free design with no moving parts and Xenon light source provides you with the reliability your laboratory needs.
- Superb stability – avoid instrument drift from excess heat with our split beam design.
- Ruggedness – our sealed, zero bounce membrane keypad is resistant to even the largest solvent spills.

Provides you with the versatility to do just about anything

Your work environment may be complex but that doesn't mean your instrument needs to be. With the simplicity and elegance of the LAMBDA Bio, you'll be empowered to analyze samples when and where your projects demand:

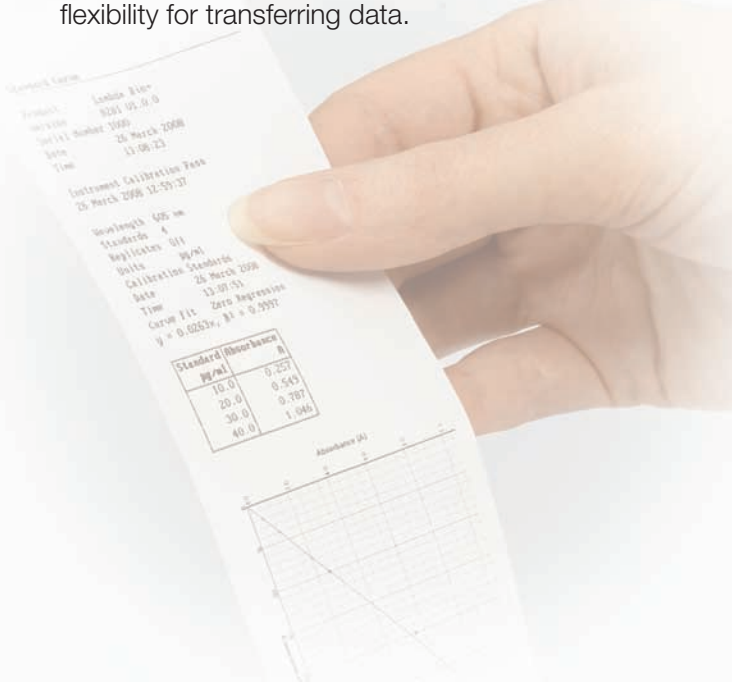
- View, expand, and manipulate full spectra quickly and easily with the clear 11.5 cm by 8.7 cm backlit LCD display.
- Feel confident – low stray light provides exceptional linearity and confidence in your measurements.
- Keep up the pace – our innovative polychromator technology will give you the speed and performance you need to keep up with your fast paced laboratory.
- Save time – our optical design allows samples to be run with no sample compartment lid.
- Personalize your laboratory – the huge on-board memory storage will allow you to store up to 90 methods along with unique method names and calibration information (only available on the Bio+).
- Convenient sampling flexibility – measure your samples in any of our high quality precision glass, quartz, or disposable cells:
  - Macro cells: 3.5 ml
  - Semi-micro cells: 1.4 ml
  - Micro cells: 750 µl
  - Ultra-micro cells: 15 µl



the flexibility and performance you expect from a LAMBDA

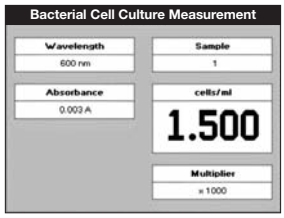
Share the knowledge – multiple archiving and data sharing options

- **Collect data from up to 8 instruments:** a single PC can be configured to accept and automatically display data from up to 8 instruments. Data can be archived in Excel® (.xls), ASCII (.csv or .txt), graphics (.emf), or rich text (.rtf) formats.
- **Built-in USB port:** transfer data to your computer for viewing, manipulating, printing, or archiving using the built in USB connection port. LAMBDA Bio PVC software provided as standard with all instruments.
- **Optional integrated thermal printer:** For your permanent records, use the optional thermal printer to print all your results. With the standard 57 mm printer roll, your print-out can accommodate:
  - Calibration Data
  - Result
  - Time and Date
- **Secure Digital (SD) Flash Storage Card or Bluetooth® compatible:** for your archiving convenience, the LAMBDA Bio can be outfitted to accommodate a standard SD flash storage card or Bluetooth® accessory allowing you additional flexibility for transferring data.

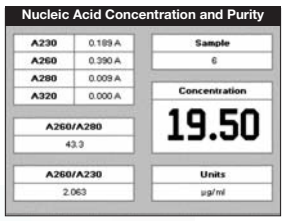


Experience the power – flexible on-board software

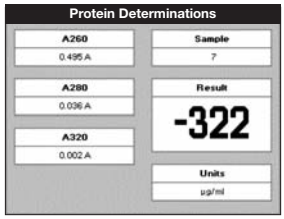
The LAMBDA Bio software is optimized to provide you with answers fast and conveniently. Save your own methods or choose from our broad range of pre-loaded measurement modes for simple, efficient analysis.



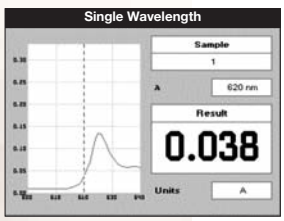
Calculates cell density to ensure cell proliferation is sufficient for induction or harvesting. Choose from OD units or enter a factor to calculate cells/ml.



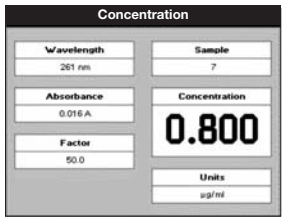
Measure DNA, RNA or Oligonucleotides. Pathlength and dilution factors produce direct concentration results.



Calculate protein concentration by direct UV, BCA, Biuret, Lowry and Bradford methods.



Allows you to specify a single wavelength to acquire data in %T or absorbance.



Data acquired at a defined wavelength will be multiplied by a constant selected by the user and the result displayed.

SPECIFICATIONS		LAMBDA Bio	LAMBDA Bio+
Optical design		Split beam	
Wavelength	Range	190-1100 nm	
	Scanning range	200-950 nm	
	Calibration	Automatic when the instrument is switched on	
	Accuracy	±2 nm	
	Reproducibility	±1 nm	
Spectral bandwidth		5 nm	3 nm
Light source		Pulsed Xenon lamp – 5+ year lifetime	
Photometric	Range	-0.300 to 2.500 A, 0 to 199 %T	
	Linearity	±0.005 A or 1% of the reading, whichever is the greater at 546 nm	
	Reproducibility	±0.003 A (0-0.5 A), ±0.007 A (0.5-1.0 A)	
Stray light		<0.5% at 220 nm and 340 nm using $NaNO_2$	
Zero stability		±0.01 A/hour	
Noise		0.005 peak to peak 0.002 rms	
Stored capacity		9	90
Display		11.5 cm x 8.8 cm	
Keypad		Sealed membrane keypad	
Outputs		USB, SD Card (optional), Bluetooth® (optional), Printer (optional)	
Dimensions (WxHxD)		340 x 330 x 170 mm (340 x 420 x 170 mm with printer attached)	
Weight		3.2 kg (7.1 lb)	
Power input		100-250 V, 50/60 Hz, Max 30 VA	
Languages		English, Spanish, German, French, Italian, Japanese	
Warranty		1 year	

ONLINE ORDERING INFORMATION

Part No.	System
L7110184	LAMBDA Bio
L7110185	LAMBDA Bio with Printer
L7110186	LAMBDA Bio+
L7110187	LAMBDA Bio+ with Printer
L7110188	LAMBDA Bio+ with SD Card

OPTIONS AND CONSUMABLES

Part No.	Description
L7110230	Printer module
L7110231	PVC Software & PC USB Connection*
L7110232	Spare printer paper (20 rolls)
L7110233	Bluetooth® accessory

** Included in all models except the LAMBDA Bio and LAMBDA Bio with printer.*

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