

# RBD-5000 Series Benchtop Digital Refractometer



Version 2.0

## Brochure

# INTRODUCTION

The Laxco™ RBD-5000 Series Digital Benchtop Refractometers are engineered for laboratories that demand high accuracy, durability, and ease of use. Designed with a robust benchtop footprint and a sapphire measuring surface—harder and more scratch-resistant than standard glass—the RBD-5000 ensures long-lasting performance and consistent readings over time. The intuitive 5.6-inch touchscreen color LCD display provides a modern and user-friendly interface for efficient operation.

Featuring Automatic Temperature Compensation (ATC), the RBD-5000 minimizes temperature-related measurement errors, while AFM technology enhances reliability by taking 15 rapid readings and displaying the mean result. Ideal for micro-volume analysis, it requires just 4 to 5 drops of sample, and the IP65 rating ensures protection from water and dust. Additional features include a stainless steel prism well for easy cleaning, LED illumination for low-light environments, single-button calibration, and a RS232 interface for seamless PC connectivity. GLP-compliant models are also available for regulated environments.



## KEY FEATURES

- Robust design for benchtop use
- 5.6" touchscreen color LCD
- Automatic Temperature Compensation (ATC) to prevent inaccurate readings due to temperature fluctuations.
- Stainless steel prism well for excellent protection and easy cleaning
- GLP Model available
- IP65 rating for protection against water and dust
- 589.3nm LED for easy readings in any low light situation, and increased accuracy
- Requires 4 to 5 drop sample size for micro-volume detection
- AFM technology measures the sample 15 times, and displays the mean value
- Ability to enter unique user ID and sample ID
- Single button calibration with distilled water
- RS232 interface for connection to PC

## SPECIFICATION - RBD-5000

MEASURING RANGE	nD	1.3000 - 1.7000
	Brix	0.0 - 100.0%
RESOLUTION	nD	0.0001
	Brix	0.1%
REPRODUCIBILITY	nD	±0.0002
	Brix	±0.1%
TEMPERATURE RANGE		0-95°C
TEMPERATURE RESOLUTION		0.1°C
TEMPERATURE CONTROL MODEL		Water bath (available separately)
TEMPERATURE CONTROL RANGE		NA
TEMPERATURE CONTROL ACCURACY		NA
INTERFACE		RS232
DISPLAY		5.6" touchscreen color LCD
DATABASE		100 data groups
PRISM		Hardened glass
N.W. / G.W.		4kg / 5kg
DIMENSIONS (L*W*H)		36x24x15cm
DIMENSIONS WITH PACKAGING		51x40x29cm
SOFTWARE		Transfer data to PC

## SPECIFICATION - RBD-5001

MEASURING RANGE	nD	1.3000 - 1.7000
	Brix	0.0 - 100.0%
RESOLUTION	nD	0.0001
	Brix	0.1%
REPRODUCIBILITY	nD	±0.0002
	Brix	±0.1%
TEMPERATURE RANGE		0-95°C
TEMPERATURE RESOLUTION		0.1°C
TEMPERATURE CONTROL MODEL		Peltier and water bath (available separately)
TEMPERATURE CONTROL RANGE		5-80°C
TEMPERATURE CONTROL ACCURACY		±0.2°C
INTERFACE		RS232, USD
DISPLAY		5.6" touchscreen color LCD
DATABASE		500 data groups
PRISM		Sapphire
N.W. / G.W.		4kg / 5kg
DIMENSIONS (L*W*H)		36x24x15cm
DIMENSIONS WITH PACKAGING		51x40x29cm
SOFTWARE		Transfer data to PC

## SPECIFICATION - RBD-5002

MEASURING RANGE	nD	1.3000 - 1.7000
	Brix	0.0 - 100.0%
RESOLUTION	nD	0.0001/0.00001
	Brix	0.1%/0.01%
REPRODUCIBILITY	nD	±0.0002
	Brix	±0.02%
TEMPERATURE RANGE		0-95°C
TEMPERATURE RESOLUTION		0.1°C
TEMPERATURE CONTROL MODEL		Peltier and water bath (available separately)
TEMPERATURE CONTROL RANGE		5-80°C
TEMPERATURE CONTROL ACCURACY		±0.2°C
INTERFACE		RS232, USB
DISPLAY		5.6" touchscreen color LCD
DATABASE		1000 data groups
PRISM		Sapphire
N.W. / G.W.		4kg / 5kg
DIMENSIONS (L*W*H)		36x24x15cm
DIMENSIONS WITH PACKAGING		51x40x29cm
SOFTWARE		Transfer data to PC



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