

# LMC-3000, Laboratory Centrifuge

## DESCRIPTION

**LMC-3000** is a modern low-speed bench-top centrifuge designed for operation with microtest plates and centrifuge tubes up to 50 ml, Gel Cards. This device is widely used in biomedical profile laboratories.

### FEATURES:

- Soft start and run-down of the rotor;
- User-friendly setting of centrifugation parameters and simultaneous display of both set and actual values;
- Safe operation at any speed is provided by metal protection chamber and case cover, automatic stop at imbalance and a lock keeping the lid closed while the centrifuge is running;
- Low noise level;
- Rotor selection;
- Setting rotor speed in RPM or RCF (Relative Centrifugal Force);
- Multiple acceleration (Slow, Normal, Fast) and deceleration (0, Slow, Normal, Fast) modes and possibility to switch off forced braking;
- Wide choice of accessory rotors.

### NEW FUNCTIONS

## SPECIFICATIONS

Speed regulation range for centrifuge tubes	100–3,000 rpm (1,610 × g)
Speed regulation range for microtitre plates	100–2,000 rpm (560 × g)
Setting resolution	100 rpm
Rotor imbalance diagnostics (automatic stop, "IMBALANCE" warning)	
Display	LCD, 2 × 16 signs
Digital time setting	1–90 min (increment 1 min)
Chamber diameter	335 mm
Overall dimensions (W × D × H)	495 × 410 × 235 mm
Weight	11.8 kg
Nominal operating voltage 230 V, 50/60 Hz or 120 V, 50/60 Hz	
Power consumption (230 / 120 V)	110 W (0.5 A) / 120 W (1 A)

<b>ORDERING INFORMATION:</b>	Cat. number
<b>LMC-3000</b> without rotors	BS-010208-AAA

Rotor R-12/15



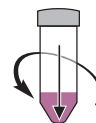
Rotor R-24GC



## Basic Plus Product Class



Product video is available on the website



# LMC-4200R, Laboratory Refrigerated Centrifuge



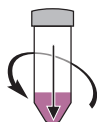
DESCRIPTION

Laboratory bench-top centrifuge with refrigeration **LMC-4200R** provides temperature control of biomaterial during centrifugation. Temperature control of the so-called "cold-shelf" is a gold standard for enzymologists and cell biologists because it ensures conditions necessary for reproducibility of the sample preparation stage. Temperature control absence at this stage can cause unpredictable results.

**LMC-4200R** is a modern centrifuge designed for operation with microtest plates, Gel Cards and tubes from 2 to 50 ml.

#### FEATURES:

- Effective way of acceleration and deceleration:  
Run-up time 20 sec;  
Run-down time, not more 30 sec;
- Efficient rate of chamber refrigeration: under 10 min;
- Maintenance of stable temperature during operation;
- User-friendly setting of centrifugation parameters (speed, temperature, time) and simultaneous display of both set and actual values;
- Safe operation is provided by a metal protection chamber and a case cover, automatic stop at imbalance (emergency shutdown, "IMBALANCE" displayed) and a lock keeping the lid closed while the centrifuge is running;
- Low noise level;
- Possibility to switch off forced braking;
- Wide choice of accessory rotors;



- Rotor selection; **NEW FUNCTIONS\***
- Setting rotor speed in RPM or RCF (Relative Centrifugal Force);
- Multiple acceleration (Slow, Normal, Fast) and deceleration (0, Slow, Normal, Fast) modes and possibility to switch off forced braking;

\* — The new features will be available from middle of 2017.  
To follow the updates - subscribe to the newsletter at our website: [www.biosan.lv](http://www.biosan.lv)



Product video is available on the website

Rotor R-12/10 and icy layer on the chamber walls



SPECIFICATIONS

Temperature control range	-10°C ... +25°C
Stable temperature maintenance range	25°C below ambient ... to +25°C
Temperature setting resolution	1°C
Speed regulation range for centrifuge tubes	100–4,200 rpm (3,155 × g)
Speed regulation range for microtitre plates	100–2,000 rpm (560 × g)
Speed setting resolution	100 rpm
Rotor imbalance diagnostics (automatic stop, "IMBALANCE" warning)	
Slowdown time, not more	30 sec
Display	LCD, 2 lines
Digital time setting	1–90 min (increment 1 min)
Chamber diameter	335 mm
Dimensions (W × D × H)	635 × 580 × 335 mm
Weight	56 kg
Nominal operating voltage	230 V, 50 Hz
Power consumption (230 V)	990 W (4.3 A)

**ORDERING INFORMATION:** Cat. number

**LMC-4200R** without rotors BS-010212-AAA

# Interchangeable Rotors and Accessories for LMC-3000 and LMC-4200R

NEW ROTOR FOR LMC-4200R

Rack RR-U

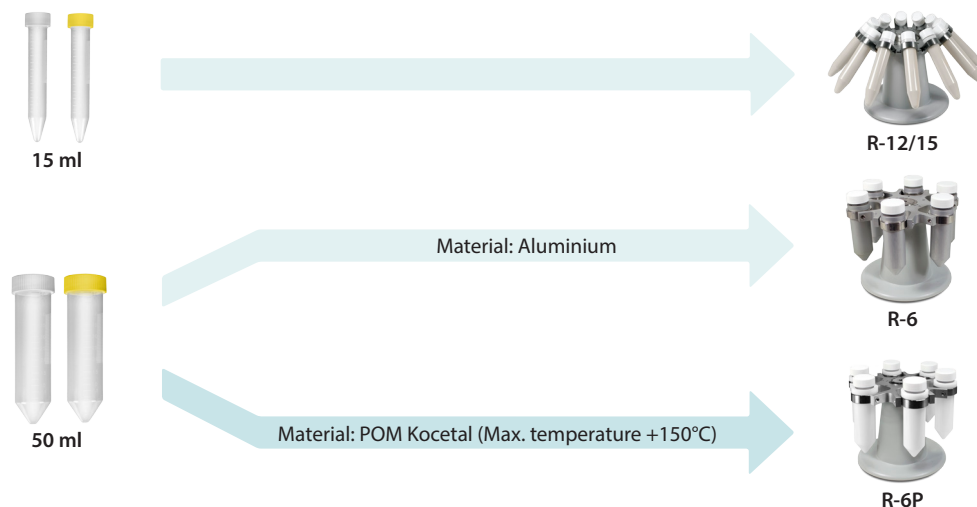


	Rotor R-12/10	Rotor R-24/10	Rotor R-6	Rotor R-6P
Rotor type	Swing-out			
Dimensions (Ø×length)	16×105 mm		29×115 mm	
Capacity	12	24	6	
Tube's volume	10-15 ml		50 ml	
Max. speed	4,200 rpm	4,000 rpm	4,200 rpm	
Max. RCF:	<b>LMC-3000</b> 1,610×g	<i>Not applicable</i>	1,610×g	
	<b>LMC-4200R</b> 3,155×g	2,860×g	3,155×g	
Cat. number:	BS-010208-BK	BS-010212-JK	BS-010208-DK	BS-010208-XK

## HOW TO CHOSE ROTOR?

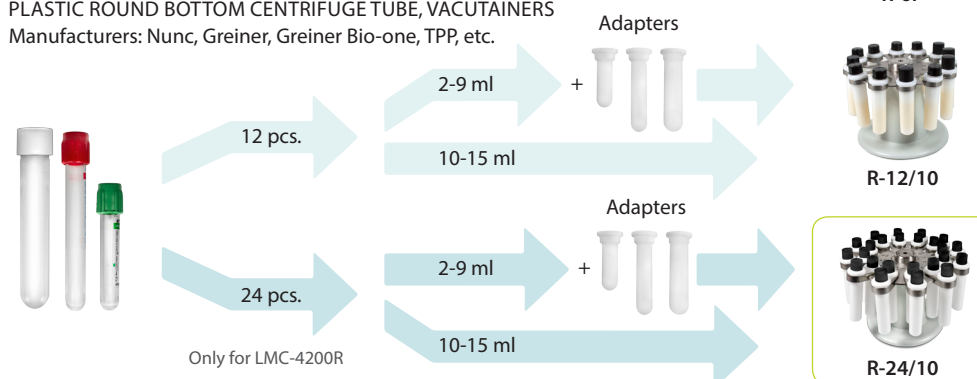
### PLASTIC CONICAL BOTTOM CENTRIFUGE TUBE

Manufacturers: Falcon, Greiner Bio-one, Sarstead, Corning, Nunc, TPP, etc.



### PLASTIC ROUND BOTTOM CENTRIFUGE TUBE, VACUTAINERS

Manufacturers: Nunc, Greiner, Greiner Bio-one, TPP, etc.



## Interchangeable Rotors and Accessories for LMC-3000 and LMC-4200R



Rack RR-U



Rotor R-12/15		Rotor R-2	Rotor R-24GC
Angled Swing-out	Rotor type	Swing-out	
17 × 120 mm	Dimensions (w × l)	128 × 85.6 mm	53 × 74 mm
12	Capacity	2	24
15 ml	Max. height	up to 45 mm	—
4,200 rpm	Max. speed	2,000 rpm	1,500 rpm
1,610 × g	Max. RCF:	560 × g	280 × g
3,155 × g		560 × g	280 × g
BS-010208-EK	Cat. number:	BS-010208-AK	BS-010208-VK

### STANDARD 96-WELL MICROTITRE PLATES AND DEEPWELL PLATES UP TO 45 MM

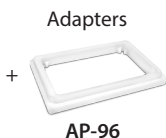
Manufacturers: Nunc, Greiner, Greiner Bio-one, etc.



R-2

### 96-WELL PCR PLATE OR SEMI-/ UNSKIRTED PCR PLATE

Manufacturers: Nunc, Greiner, Greiner Bio-one, etc.



Material: **Ertacetal® C** and is autoclavable



R-2

### GEL CARDS

Manufacturers: Grifols®, DiaMed®, Bio-Rad® etc.



**R-24GC**, Rotor for Gel Cards for blood group serology testing (Forward Group, Reverse Group, RhD Type and 3 cell antibody screen). Recommended centrifugation time – 9 minutes



R-24GC

### ORDERING INFORMATION: optional accessories for rotors

**Adapters\*** for R-2:

**AP-96** 2 adapters for 96-well semi-skirted and non-skirted PCR plates

Cat. number

BS-010219-DK

**Adapters\*\*** for R-12/10, R-24/10

Vacutainers dimensions (Ø × length)

**BN-13/75** for vacutainers® 2–5 ml

13 × 75 mm

BS-010208-PK

**BN-13/100** for vacutainers® 4–8 ml

13 × 100 mm

BS-010208-QK

**BN-16/100** for vacutainers® 8–9 ml

16 × 100 mm

BS-010208-RK

**Rack for rotors**

**RR-U**

BS-010208-UK

\* — Set of 2 adapters, made of **Ertacetal® C** and is autoclavable

\*\* — Set of 12 adapters, made of POM-C (polyacetal). Max. temperature +100°C