



FRONTIER™ 5515&5515R

High-Speed Micro Centrifuges



Smooth and Dependable High-Speed Micro Centrifuges for Liquid Separation Applications

Frontier 5515 and 5515R Benchtop Micro Centrifuges provide high-speed operation for a wide variety of tube volumes and capacities. With refrigeration capabilities (FC5515R), 10 acceleration/deceleration settings and multiple safety features, the FC5515 and FC5515R ensure stable liquid separation for applications requiring high-speed operation in molecular and cell biology, clinical, research and industrial applications.

Features:

- Excellent functionality when used with rotors compatible with high throughput and BIOSEALS options for 1.5/2.0 ml or 5 ml microtubes, spin columns, and cryo tubes. Additionally, when equipped with the appropriate rotor options, these centrifuges can also be used in diagnostic settings for hematocrit capillaries and PCR tubes/strips.
- Designed for ease of operation, Frontier Micro centrifuges feature convenient control on an intuitive interface, which allows for responsive operation – even when wearing gloves.
- Enclosing all their functionalities within a small footprint, Frontier Micro centrifuges save valuable space on the lab bench.

FRONTIER™ 5515&5515R High-Speed Micro Centrifuges

Easy-to-Use Control Panel

- Easy-to-turn rotary knob for parameter adjustments
- Waterproof keypad provides protection that helps significantly increase the lifespan of the product
- One-touch toggling between speed, G-force, and temperature controls (R model only)
- LCD display with light blue backlight which projects information in real-time
- View and adjust user parameters from the main screen; no need to navigate through sub-screens



High-Performance Driven by Sophisticated Technology

- Powerful induction motor reaches speeds up to 15200 RPM in less than 16 seconds
- Maximum G-force of 21953 RCF
- 10 acceleration/deceleration settings
- 99 memory sets to quickly store and recall commonly used parameters
- FC5515R model has refrigeration capabilities from 40 °C to -20 °C
 - Cools down from 23 °C to 4 °C in less than 10 minutes
 - R290, an environmentally friendly coolant, contributes to the eco-friendliness of refrigerated centrifuges by minimizing their environmental impact and supporting efforts to combat global warming
 - Pre-cool feature quickly lowers the temperature of rotor and chamber before a run



Safety Features that Prevent Injury

- Motorized lid-locking system prevents centrifuge from opening during operation
- Rotor imbalance sensing systems stops the unit when it detects an imbalanced load
- Sealed and TÜV certified rotors to safeguard operators from harmful aerosols



Flexibility for Varied Centrifugation Needs

- Works with microtube rotors with different rotor capacity – 24 x 1.5/2.0 ml, 30 x 1.5/2.0 ml or 44 x 1.5/2.0 ml
- Compatible with 6 rotors (7 rotors on FC5515 model), including spin column rotor, hematocrit rotor, PCR Strips/tubes rotor and angle rotor for 5ml tubes
- An ergonomically designed rotors for microtubes, spin columns and PCR Stripes/tubes quickly and easily closes with 1/4 of a turn



FRONTIER™ 5515&5515R

High-Speed Micro Centrifuges

Specifications

Model		FC5515		FC5515R	
Order No.		230V: 83041547	120V: 83041548	230V: 83041549	120V: 83041550
Speed Range		200 rpm – 15200 rpm; 10 rpm / increments			
Maximum RCF		21953 x g; 10 x g / increments			
Maximum Capacity (Rotor)		Angle Rotor: 44 x 1.5/2.0 ml			
Temperature Range		Air cooled		-20 °C to 40 °C, 1 °C/increments	
Refrigerant		N/A		R290 (Propane)	
Running Time		Quick Spin, 10 sec to 99 hr 59 min, or continuous			
Noise Level (depending on the rotor)		≤ 60 + 2 dB(A)		≤ 57 + 2 dB(A)	
Acc/Dec Levels		10/10			
Allowable Density at Maximum Speed		1.2 g/ml			
Allowable Kinetic Energy		7204 Nm			
AC Power		230 V/50-60 Hz	120 V/50-60 Hz	230 V/50-60 Hz	120 V/50-60 Hz
Voltage Fluctuation		± 10%			
Current Consumption		1.3 A	2.3 A	2.4 A	5.1 A
Power Consumption		270 W	280 W	500 W	560 W
Dimensions (W x D x H)		280 x 393 x 287 mm		280 x 555 x 287 mm	
Net Weight (without rotor)		16 kg		35 kg	
Shipping Dimensions (W x D x H)		410 x 540 x 400 mm		390 x 690 x 390 mm	
Shipping Weight (without rotor)		20 kg		44 kg	
Ambient conditions (EN/IEC 61010-1)	Environment	For indoor use only			
	Altitude	Use up to an altitude of 2000 m			
	Ambient temperature	5 °C up to 35 °C			
	Max. relative humidity	Max. relative humidity 80 % for temperatures up to 31 °C, Decreasing linearly to 50 % relative humidity up to 35 °C.			
EMC		EN/IEC 61326-1 Class B emissions, Basic immunity FCC Class B emissions			
Not suitable for use in hazardous environments.					

Rotors for FRONTIER™ FC5515 and FC5515R

	Angle Rotor 44 × 1.5/2.0 ml	
	Item No.	30372717
	Rotor Capacity	44 x 1.5/2.0ml
	Rotor Type	Angle, 32°/55°
	Permissible Net Weight	44 x 3.4 g
	Lowest Temp. at max. speed	10 °C

Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	15,000		
Quantity in Package	n/a	6/pk	
Max. RCF	21,127 x g / 21,379 x g	20,625 x g	20,625 x g
Tube Specifications			
Tube Type	Microtube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	44		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	45	

	Angle Rotor 30 × 1.5/2.0 ml	
	Item No.	30130872
	Rotor Capacity	30 x 1.5/2.0 ml
	Rotor Type	Angle, 45°
	Permissible Net Weight	30 x 3.4 g
	Lowest Temp. at max. speed	9 °C

Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	13,500		
Quantity in Package	n/a	6/pk	
Max. RCF	19,150 x g	16,933 x g	18,344 x g
Tube Specifications			
Tube Type	Microtube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	30		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	45	

Rotors for FRONTIER™ FC5515 and FC5515R



Angle Rotor 12 × 5 ml FA	
Item No.	30130873
Rotor Capacity	12 x 5 ml
Rotor Type	Angle, 45°
Permissible Net Weight	12 x 9.5 g
Lowest Temp. at max. speed	7 °C

Accessory Specifications	n/a			
Accessory Item No.	n/a	30130886	30130887	30130888
Accessory Type	n/a	Adapter		
Max. RPM	14,500			
Quantity in Package	n/a	6/pk		
Max. RCF	19,978 x g	16,452 x g	17,158 x g	17,628 x g
Tube Specifications		 		
Tube Type	Microtube		Cryo Tube - Flat Bottom	Cryo Tube - Round Bottom
Tube volume	5 ml	1.5/2.0 ml	1.0 ml	1.8 ml
Tubes per Rotor	12			
Max. Diameter (mm)	17	11	12.6	
Tube Height (mm)	60	42	41	48



Rotor Angle 24 x 2.0 ml Spin Column	
Item No.	83041050
Rotor Capacity	24 × 2.0 ml
Rotor Type	Angle, 45°
Permissible Net Weight	24 x 3.8 g
Lowest Temp. at max. speed	9 °C

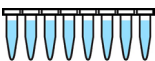
Accessory Specifications	n/a
Accessory Item No.	n/a
Accessory Type	n/a
Max. RPM	13,500
Quantity in Package	n/a
Max. RCF	17,317 × g
Tube Specifications	
Tube Type	Spin Column
Tube volume	2 ml
Tubes per Rotor	24
Max. Tube Diameter (mm)	11
Tube Height (mm)	45

Rotors for FRONTIER™ FC5515 and FC5515R

	Angle Rotor 24x1.5/2.0 ml BIOSEALS V2	
	Item No.	30642371
	Rotor Capacity	24 × 1.5/2.0 ml
	Rotor Type	Angle, 45°
	Permissible Net Weight	24 × 3.4 g
	Lowest Temp. at max. speed	6 °C

Accessory Specifications	n/a		
Accessory Item No.	n/a	30130884	30130885
Accessory Type	n/a	Adapter	
Max. RPM	15,200		
Quantity in Package	n/a	6/pk	
Max. RCF	19,165 × g	19,165 × g	20,932 × g
Tube Specifications			
Tube Type	Microtube		
Tube volume	1.5/2.0 ml	0.2/0.4 ml	0.5 ml
Tubes per Rotor	24		
Max. Tube Diameter (mm)	11	6	8
Tube Height (mm)	40	45	

	Angle Rotor 4 × 8 Place PCR Strips	
	Item No.	30130874
	Rotor Capacity	4 x 8 Place PCR Strips
	Rotor Type	Angle, 45°
	Permissible Net Weight	4 x 3.5 g
	Lowest Temp. at max. speed	6 °C

Accessory Specifications	n/a
Accessory Item No.	n/a
Accessory Type	n/a
Max. RPM	15,000
Quantity in Package	n/a
Max. RCF	15,343 × g
Tube Specifications	
Tube Type	8-w PCR Strip
Tube volume	02./04. ml
Tubes per Rotor	32
Max. Tube Diameter (mm)	n/a
Tube Height (mm)	n/a

*No Adapters

Rotors for FRONTIER™ FC5515 and FC5515R

	Hematocrit Rotor 24 × Capillaries	
	Item No.	83041007
	Rotor Capacity	24 × Capillaries
	Rotor Type	Hematocrit, 90°
	Permissible Net Weight	24 x 0.2 g
	Lowest Temp. at max. speed	n/a
Accessory Specifications	n/a	
Accessory Item No.	n/a	
Accessory Type	n/a	
Max. RPM (FC5515)	12,000	
Quantity in Package	n/a	
Max. RCF (FC5515)	14,970 × g	
Tube Specifications		
Tube Type	Capillaries	
Tube volume	n/a	
Tubes per Rotor	24	
Max. Tube Diameter (mm)	1.9 mm	
Tube Height (mm)	75 mm	

*No Adapters