



Frontier™ 5000 Series

Multi-Pro Centrifuges



Powerful and Versatile Universal Centrifuges for Virtually Every Lab Application

Frontier 5000 Multi-Pro Centrifuges are designed for universal use in virtually every application in research, industrial & clinical laboratories. Combine with our range of rotors & accessories for customized use in specific applications. Available in 5 models with capacities from low microliter to 6x250 ml - and featuring high speed performance at maximum volume, automatic rotor identification system and safety features, these multi-purpose centrifuges are a must for any lab.

Standard Features Include:

- **Powerful Platform Offers Maximum Flexibility for a Range of Applications**
Our multi-purpose centrifuges offer a high-speed centrifugation platform which can be customized to fit workflow needs using a wide variety of rotors and accessories.
- **Intuitively Designed for User-Friendly Operation**
The intuitive design of the centrifuges & accessories enable easy access to parameter settings, and quick rotation between applications. Features include automatic rotor recognition and backlit LCD.
- **Solid Engineering Ensures Reliability and Durability**
The performance of these centrifuges is propelled by German engineering, and high-quality components for reliable use. Constructed of chemical-resistant stainless steel to ensure durability in lab use.
- **Increased Safety With Built-in Protective Features**
Frontier 5000 Series is equipped with protective features, including automatic over-speed protection, imbalance detection and self-diagnostic system to ensure reliable use and operator safety.

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Maximum Application Flexibility

Choose from five models from small to medium capacity, speed range of 14,000 – 16,000 rpm and non-refrigerated/refrigerated options to suit your application. Ideal for spinning most tubes and bottles in the lab, including microtubes, blood tubes, round bottom tubes, conical tubes and microtiter plates.

FC5714 Centrifuge (non-refrigerated)

- Compatible with up to 9 optional rotors and 77 accessories
- Capacities from microliter to 4x100 ml
- High-speed centrifugation (>10000 rpm) from 0.2 ml up to 1.5/2.0 ml tubes

FC5718 (non-refrigerated) and FC5718R (refrigerated) Centrifuges

- Compatible with up to 19 optional rotors and 122 accessories
- Capacities from microliter to 4x100 ml
- High-speed centrifugation (>10000 rpm) from 0.2 ml up to 85 ml tubes
- Temperature variable range of -20 °C to 40 °C (FC5718R)

FC5816 (non-refrigerated) and FC5816R (refrigerated) Centrifuges

- Compatible with up to 13 optional rotors and 71 accessories
- Capacities from microliter to 6x250 ml
- Improved sample processing through-put with additional rotor for blood collection tubes and standard conical tubes
- High-speed centrifugation (>10000 rpm) from 0.2 ml up to 250 ml tubes
- Temperature variable range of -20 °C to 40 °C (FC5816R)



Intuitively Designed for Simple Operation

Frontier 5000 Series was designed to make lab processes more efficient and easier, and includes many user-friendly features & software that allow for intuitive operation.

- Automatic rotor identification makes switching between applications extremely easy
- Simple one-hand operation enabled by the selection button/rotary knob combination—even with gloves on
- Large backlit LCD display shows centrifugation settings and real-time parameters on one interface
- Program storage up to 99 runs including parameter settings and rotor types



Solid Engineering Ensures Reliability

Manufactured with high-quality components for reliable use and German engineered for high performance. Chemical and corrosion-resistant stainless steel housing ensures durability in lab environments.

- Maintenance-free induction drive
- Thread-free rotor locking mechanism
- Optimized airflow system to keep samples cool (non-refrigerated models)
- Pre-cooling program to quickly reach desired temperature (refrigerated models)
- Chemical and corrosion-resistant stainless steel housing ensures durability in lab environments
- Self-diagnostic program to record usage and error history for easy maintenance and to minimize downtime



Frontier™ 5000 Series Multi Pro Centrifuges

Model	FC5714		FC5718		FC5718R		FC5816		FC5816R	
Maximum Speed	14000 rpm 10 rpm/set		18000 rpm 10 rpm/set		18000 rpm 10 rpm/set		15000 rpm 10 rpm/set		16000 rpm 10 rpm/set	
Maximum RCF	18624 × g 10 × g/set		23542 × g 10 × g/set		23542 × g 10 × g/set		21379 × g 10 × g/set		24325 × g 10 × g/set	
Maximum Capacity	4 × 100ml		4 × 100ml		4 × 100ml		6 × 250ml		6 × 250ml	
TemperaturR range	Air cool		Air cool		-20~40℃		Air cool		-20~40 °C	
Running Time	Short Spin, 10 sec to 99 hr 59 min 59 sec, or continuous									
Noise Level (depending on the rotor)	≤ 63 ± 2 dB(A)		≤ 60 ± 2 dB(A)		≤ 60 ± 2 dB(A)		≤ 61 ± 2 dB(A)		≤ 63 ± 2 dB(A)	
Number of Compatible Rotors	9		19		19		13		13	
Acc/Dec Levels	10									
Allowable Kinetic Energy	5595 Nm		16672 Nm		25111 Nm		34363 Nm		34363 Nm	
AC Power	120V ~ 50/60 Hz	230 V ~ 50/60 Hz	120V ~ 50/60 Hz	230 V ~ 50/60 Hz	120V ~ 50/60 Hz	230 V ~ 50/60 Hz	120V ~ 50/60 Hz	230 V ~ 50/60 Hz	120V ~ 50/60 Hz	230 V ~ 50/60 Hz
Current Consumption	2.4 A	1.1 A	4.0 A	2.0 A	6.0 A	3.0 A	4.2 A	2.4 A	7.8 A	3.7 A
Power Consumption	300 W	240 W	475 W	455 W	660 W	660 W	520 W	530 W	850 W	785 W
Voltage Fluctuation	± 10 %									
Dimensions (W × D × H)	362 x 493 x 330 mm		408 × 499 × 351 mm		407 × 731 × 359 mm		446 × 538 × 354 mm		723 × 538 × 354 mm	
Net Weight (without rotor)	30 kg		43 kg		60 kg		52 kg		77 kg	
Environment	For indoor use only									

Other Standard Features and Equipment

Ten acceleration and ten deceleration rates, pre-selection of running time from 10s to 99h 59min or continuous, audible signal at the end of each run with melody options, quick spin, CFC-free refrigeration system, sample temperature indication and standstill cooling (refrigerated models)

Compliance

- **Product Safety:** EN 61010-1; EN 61010-2-020
- **EMC:** EN 61326-1