

Refrigerated | High speed | Benchtop

TGL-21



Order No.:010112100

TGL-21 is a intelligent, versatile high speed refrigerated centrifuge runs up to 21000rpm. The centrifuge is a large capacity model which can accommodate 0.2ml to 750ml tube/bottle. Fixed angle rotors are compatible with tubes 0.2ml to 100ml. Swing out rotors are compatible with 1.5ml to 750ml tube or bottle, blood tube and microplate. With its leading technologies and many user-friendly functions,it can perfectly meet your centrifugal needs.

We solve two core safety risks

Risk one:Overspeed operation
Solution: Automatic rotor identification to prevent over speed operation

Automatic rotor identification by RFID

- 1. Static identification. Just put in the rotor, recognize rotor without running.
- 2. Prevent overspeed. User cannot set RPM/RCF over the rotor’s limit.
- 3. More information. Besides rotor’s max speed,centrifuge can identify information such as rotor capacity,production time and remaining life time.
- 4. Can recognize much more rotors

Risk two:Unbalanced operation
Solution: Imbalance detection in the whole operation process & automatically stop

Imbalance sensor:Three axis gyroscope

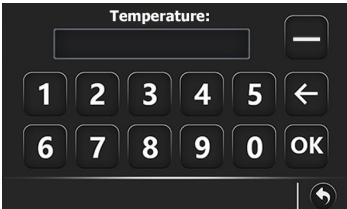
- 1. Detect imbalance in the whole operation process.
- 2. Adjust imbalance point automatically.
- 3. Automatic stop when reach imbalance point.
- 4. Imbalance detection is more accurate



LCD touch screen

- >Simple and clear to show all parameters
- >Touch screen,easy to set parameters
- >RCF can be set directly
- >Intelligent status display,real-time and real values
- >User can set parameters even with gloves
- >User can reset parameters when rotor is spinning

PROGRAM	ROTOR	SPEED	TIME	TEMP	ACC/DEC
001	cx	12X1.5mL 10000rpm 6987Xg	00:05:00	4	02/02
002		24X2mL 1001rpm 104Xg	00:05:00	4	02/02
003		12X1.5mL 1001rpm 70Xg	00:05:00	4	02/05
004		12X1.5mL 1001rpm 70Xg	00:05:00	4	02/03
005		12X1.5mL 1001rpm 70Xg	00:05:00	4	02/02



Speed	1	2	3	4	5	6	7
	12000	15000	11000	8000	9000	10000	15000
Time	00:01:00	00:01:00	00:01:00	00:01:00	00:01:00	00:01:00	00:01:00
Temp	4	4	4	4	4	4	4
Rotor	12X1.5mL	Acc 02	Dec 04	Add	Del		

Sys Prompt	ON	OFF	TEMP CTRL System	OFF	ECO	PERF
Key Prompt	ON	OFF	ScreenBlank Time	10s		
Password Lock	ON	OFF	Unbalanced Sensitivity	0		
Timekeeping	When reach speed	When start running	Screen Lock Time	0s		

FEATURES

User-friendly functions

- >up to 1000 user-defined programs
- >up to 100000 run histories
- >up to 40 rates acceleration and deceleration,speed downs curvelly slowly from 600rpm to 0rpm to prevent samples shake
- >up to 7 stages multi-stage centrifugation mode available
- >up to 99h59m59s timer range, 1s increment
- >Support short spin and continuous centrifugation
- >Reservation:can reserve cooling,turn on and turn off time
- >Curve display---Speed curve,RCF curve and Temperature curve are displayed together,clear to see their changing and relations.

Ensure safety

- >Automatic rotor identification by RFID
- >Imbalance detection by three axis gyroscope
- >Motorized electronic door lock
- >Door cannot be opened when rotor is spinning
- >Gas hinges to prevent door falling
- >Port in the door for calibration and operation checking
- >Emergency door lock release
- >Password to lock the device
- >User management with permission allocation
- >Various protections to ensure safe centrifugation
- >With never be lost electronic instruction manual

Refrigeration

- >High quality compressor unit
- >-20°C to +40°C ,1°C increment
- >±1°C high temperature accuracy
- >CFC-free refrigerant
- >PID dynamic temperature control
- >Temperature sensor inside the chamber
- >Starts refrigeration when power on
- >Maintains refrigeration after spin
- >With ECO energy-saving module

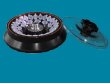
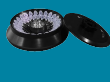
Good components

- >Motor: Variable frequency motor. stable running,maintenance free,long life
- >Housing: Thick and strong steel
- >Chamber: 316 stainless steel with teflon coating. anticorrosion and easy to clean
- >Rotor: Aluminum alloy fixed angle rotor; Steel/Stainless steel swing out rotor.
- >Rotors are autoclavable

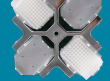
TECHNICAL DATA

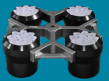
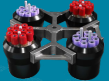
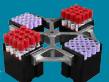
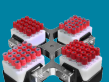
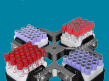
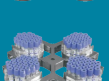
Max Speed	21000rpm
Max RCF	31405xg
Max Capacity	4x750ml
Temperature Range	-20°C ~ +40°C
Temperature Accuracy	±1°C
Speed Accuracy	±10rpm
Time Setting	1s ~ 99h59m59s
Noise	≤56dB(A)
Power Consumption	1500w
Dimension	600x680x420mm
Weight	108kg

Fixed angle rotors

	Capacity	Max Speed	Max RCF	Tube Size	Order No.
	12x1.5/2.2ml	21000rpm	30864xg	11x42mm	10101200020
	12x5ml	17000rpm	23489xg	14x54mm	10101200050
	24x1.5/2.2ml	16500rpm	26389xg	11x42mm	10102400020
	24x1.5/2.2ml (aerosol tight)	18000rpm	31405xg	11x42mm	10102400021
	12x10ml	15000rpm	20803xg	16x86mm	10101200100
	36x1.5/2.2ml	15000rpm	21784xg	11x42mm	10103600020
	6x50ml (conical bottom)	13000rpm	18440xg	29x116mm	10100600502
	6x50ml (round bottom)	13000rpm	18440xg	29x111mm	10100600503
	48x1.5/2.2ml	13000rpm	18535xg	11x42mm	10104800020
	4x100ml	11000rpm	13365xg	38x123mm	10100401000
	8x50ml (conical bottom)	11000rpm	14041xg	29x116mm	10100800502
	8x50ml (round bottom)	11000rpm	13365xg	29x111mm	10100800503
	12x15ml	12500rpm	17259xg	17x121mm	10101200150
	6x100ml	10000rpm	12063xg	38x123mm	10100601000
	8x15ml	14500rpm	18593xg	17x121mm	10100800150
	12x50ml (conical bottom)	10000rpm	14310xg	29x116mm	10101200502

Swing-out rotors

	2x3x96 well plate	4000rpm	2003xg	128x87x60mm	10000600024
	4x2x96 well plate	4200rpm	3551xg	128x87x60mm	10000800024
	4x250ml	4500rpm	3735xg	63x121mm	10000402500
	Adapter 8x50ml in 4x250ml	4500rpm	3735xg	29.5x116mm	10200800502

	Adapter 20x15ml in 4x250ml	4500rpm	3735xg	17x121mm	10202000150
	Adapter 36x10ml in 4x250ml	4500rpm	3735xg	16.5x86-110mm	10203600100
	Adapter 40x7ml (blood tube) in 4x250ml	4500rpm	3735xg	13x100mm	10204000077
	48x2-7ml (blood tube)	4000rpm	2951xg	13x75-100mm	10004800077
	64x2-7ml (blood tube)	4000rpm	2951xg	13x75-100mm	10006400077
	4x500ml	4200rpm	3551xg	80x137mm	10000405000
	Adapter 16x50ml (normal) (aerosol tight) in 4x500ml	4200rpm	3551xg	29x116mm	10201600500 10201600501
	Adapter 36x15ml (normal) (aerosol tight) in 4x500ml	4200rpm	3551xg	17x121mm	10203600150 10203600151
	Adapter 76x7ml (normal) (aerosol tight) in 4x500ml	4200rpm	3551xg	13x75-100mm	10207600077 10207600071
	20x50ml	4200rpm	3551xg	29.5x116mm	10002000500
	40x15ml	4200rpm	3551xg	17x121mm	10004000150
	80x10ml (blood tube)	4200rpm	3551xg	15x100mm	10008000107
	112x2-7ml (blood tube)	4200rpm	3551xg	13x75-100mm	10011200077
	100x1.5ml	4200rpm	3551xg	11x42mm	10010000020
	148x5ml (RIA tube)	4200rpm	3551xg	13x75-100mm	10014800050
	96x2-7ml (blood tube)	4200rpm	3551xg	13x75-100mm	10009600077
	4x750ml	4000rpm	3500xg	100x141mm	10000407500
	Adapter 12x100ml in 4x750ml	4000rpm	3500xg	38x114mm	1020120