General purpose centrifuges

What are the main differences between Thermo Scientific General Purpose X versus S Series Centrifuges?

Thermo Scientific™ General Purpose X Series Centrifuges are designed to address the full sample and protocol flexibility of a customer that switches between different protocols and samples and needs a more discreet control of their centrifuge. X series centrifuges are equipped with a full color touchscreen interface, whereas Thermo Scientific™ General Purpose S Series Centrifuges are equipped with a classic LCD display and can address a more limited amount of customer needs.

X series centrifuges include touchscreen options for efficient programming and faster results. They are excellent for applications requiring more flexibility, speed and programming. A wider array of rotor choices, higher speeds and the ability to store up to 100 programs ensure compatibility with a broad range of protocols, even across multiple applications. Specialty functions include the Thermo Scientific™ Accumulated Centrifugal Effect (ACE™) integrator function, which drives reproducibility, and the optional Thermo Scientific™ SECURE-Spin™ Mode, which supports increased sample safety and 21 CFR Part 11 data management compliance capabilities. These centrifuges offer versatility and outstanding processing performance, with a constant focus on improved safety and durability.

S Series centrifuges are designed for routine performance needs of basic research and clinical applications, often requiring repetitive and consistent protocols. With a focus on quality, throughput, and reliability, they offer a robust solution for standard applications. These centrifuges combine a safe, simple, and comfortable operation with optimized performance, innovative design, and enhanced ergonomics.



Thermo Scientific X Series Centrifuge



Thermo Scientific S Series Centrifuge

	X Series Centrifuges	S Series Centrifuges
Screen	Full-color touchscreen	LCD display
Number of programs	100 programs with step programming	6 programs
Speed	Increments of 1 rpm	Increments of 50 rpm
G-force	Increments of 1 x g	Increments of 50 x g
Time setting	In HH x MM x SS format, continuous and ACE modes	In HH x MM format as well as continuous mode
Time control	At start of the centrifugation run and at set speed	At start of the centrifugation run
Pulse button	Pulse duration is customizable	Pulse duration is fixed
Rotors	17 optional rotors for 1.6 L versions and 18 optional rotos for 4 L versions	15 optional rotors for 1.6 L versions and 13 optional rotors for 4 L versions
Sustainabilty features	Thermo Scientific™ GreenCool™ Technology (refrigerated models), Green Mode, scheduling features, greener rotor options	GreenCool technology (refrigerated models), LCD powersave mode, greener rotor options
Error messages	Error code with user directions	Error code
Data logging	Data logged and logs accessed through the Health Status Button and exportable in PDF and CSV formats	Manual storage in laboratory notebooks
Data extraction	USB port, RS 232 port, ethernet	RS 232 port
Connectivity	Optional Thermo Scientific™ SECURE-Spin™ Mode and CentriLog Plus Data Managment Software compatibility	Available through RS 232
Operating system access	2 modes of centrifuge access: open and secure	Open mode of access

X series touchscreen interface

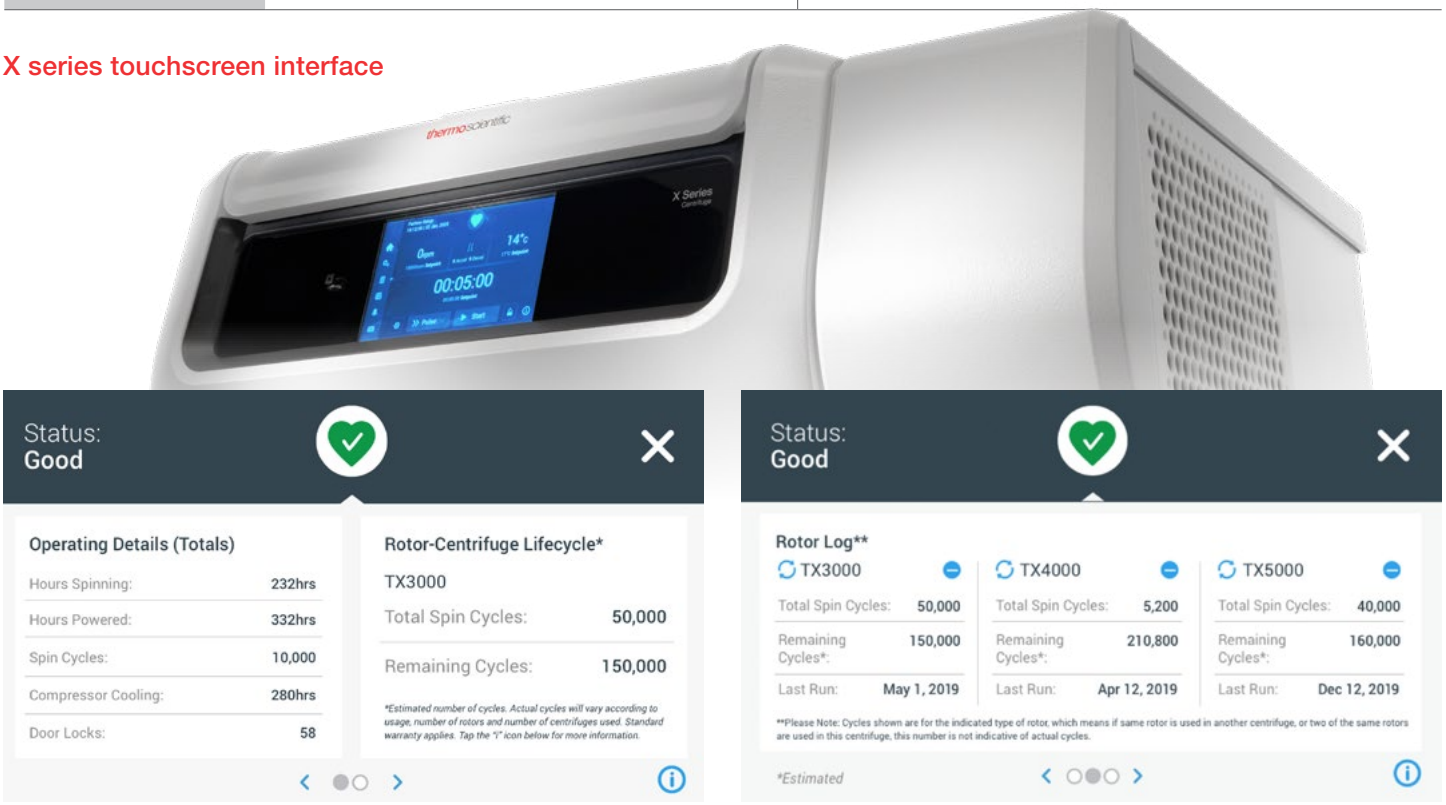


Figure 1: Centrifuge Health Status button gives a complete overview on centrifuge and rotor status

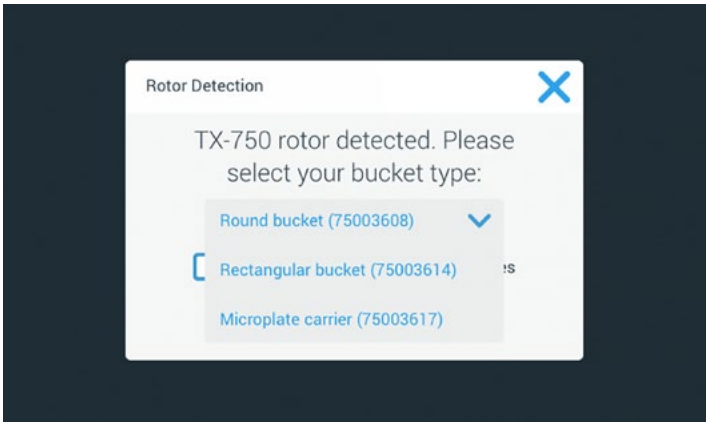


Figure 2: Example of buckets selection for the swinging buckets rotors

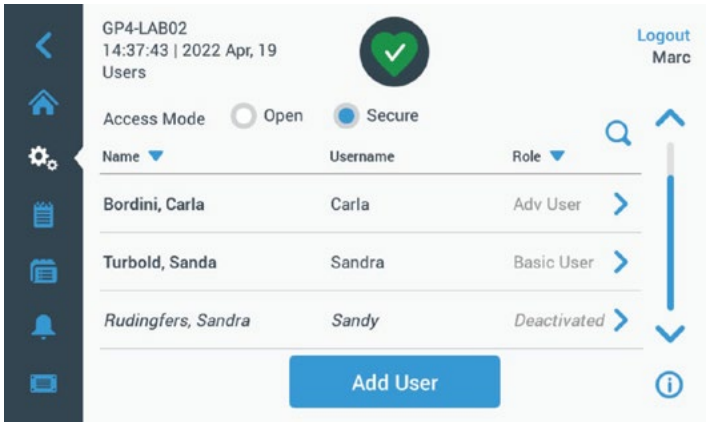
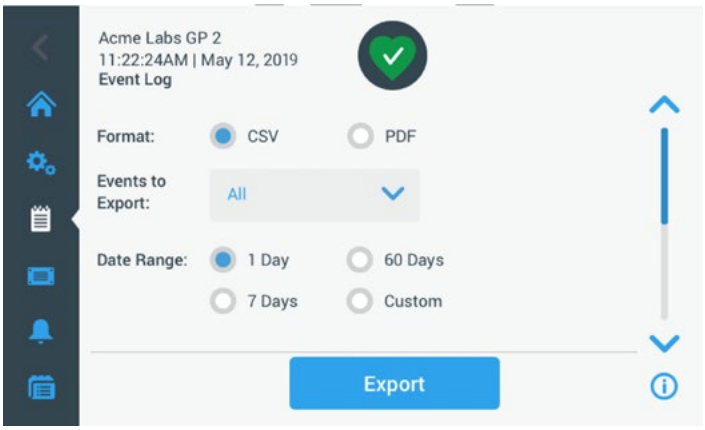


Figure 3: Thermo Scientific™ SECURE-Spin™ Mode enables advanced and secure control features in the X series centrifuges by enabling 21 CFR Part 11 data management compliance and traceability. Users can assign user rights and create up to 120 users profiles. Traceable documentation provides audit trail for setting and program changes.



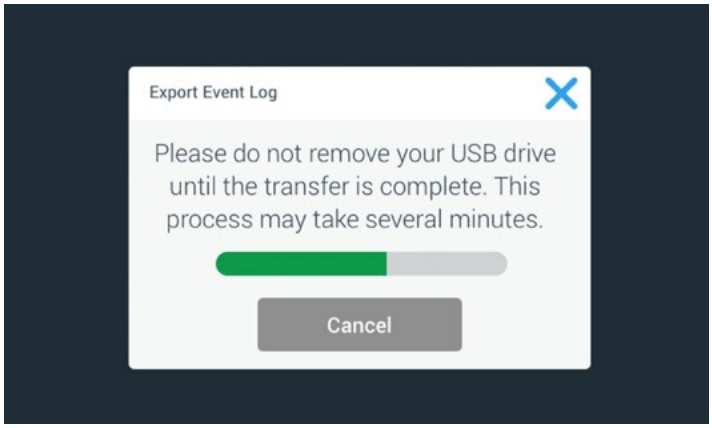


Figure 4: Through the USB Port that is conveniently located on the front of the X series device users can extract data about centrifuge health status, log of alerts, as well as information about each run.

Summary

Thermo Scientific General Purpose Centrifuges are designed to meet the needs of various applications. Our centrifuges stand out for their performance, reliability, consistency and safety. Whether performing clinical protocols, cell culture procedures, microplate processing, or anything in between, Thermo Scientific centrifuges fulfill a variety of separation needs.

Find out more at **thermofisher.com/centrifuges**

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