

# TSG Series laboratory and pharmacy refrigerators and freezers

An exceptional environment inside and out

# Designed from the ground up to help protect your work



Thermo Scientific™ TSG Series laboratory and pharmacy refrigerators are built specifically for laboratory and clinical\* environments, with the distinct needs of users in these environments in mind. Offering quiet, intuitive operation with excellent temperature performance, TSG Series refrigerators can help meet the needs of a wide variety of users who need consistent, reliable performance without sacrificing usability.

## **Sustainable and environmentally friendly**

TSG Series laboratory and pharmacy refrigerators are designed with features that support sample protection as well as sustainability objectives, such as the US Environmental Protection Agency's Significant New Alternatives Policy (SNAP) and the European Union's F-gas Regulations. Each product is ENERGY STAR™-certified and has an ACT™ Environmental Impact Factor Label that provides clear, third party-verified information about the environmental impact of laboratory products. Finally, TSG Series refrigerators are manufactured in our zero-waste-to-landfill factory located in Asheville, North Carolina.

## **Focus on your work, not your equipment**

The purpose-built TSG Series refrigerator incorporates internal design elements to help reduce its acoustic footprint. Offering quiet operation without sacrificing performance or sustainability means you can bring the refrigerator out of the hallway and back into your lab without disrupting your aural environment, enabling you to streamline your workflows and increasing efficiency for your lab.

## **Intuitive operation**

The modern controller on TSG Series laboratory and pharmacy refrigerators is intuitive and easy to use, offering quick access to the temperature setpoint, alarm logs, and settings with a bright, easy-to-read display. The controller provides low- and high-temperature, power failure, and door ajar alarms, as well as onboard data logging of high and low temperatures and alarm events.

## **Outstanding sample protection**

Temperature variation can have an impact on the viability and efficacy of vaccines, medication, reagents, and other temperature-sensitive materials. These variations can shorten product shelf life, degrade samples, and reduce vaccine effectiveness. Therefore, it is important to choose a laboratory refrigerator that has been designed for the demanding standards of the laboratory and clinical environment, such as the Thermo Scientific TSG Series refrigerator. The TSG Series has been designed from the ground up to provide excellent door-open recovery and temperature uniformity at all times, enabling you to rest easy with the knowledge that your samples are secure.

# TSG Series glass-door refrigerators



TSG Series glass-door refrigerators are purpose-built in their entirety to help meet your cold storage needs, offering quiet operation, outstanding performance, and sustainable design.

- Five convenient sizes ranging from 326L to 1447L
- Quiet operation at less than 53 dB for all models
- ENERGY STAR–certified refrigerator models
- Heat-free defrost
- Double-pane glass doors
- Four 2-inch casters; front casters are lockable
- Self-closing door with 90° stop
- Bright LED interior lighting
- Temperature, door ajar, and power failure alarms
- 12-hour controller battery backup
- Rear access port
- Keyed door locks, compatible with popular E-lock adapters
- Remote alarm contacts
- See pages 6–8 for accessories



Thermo Scientific™  
TSG3005G Refrigerator



## TSG Series glass-door refrigerators

Temp. range (set point)	Capacity (L)	Electrical plug	Doors	Shelves	Defrost	Certification	Interior dimensions D x W x H in.	Interior dimensions D x W x H cm	Exterior dimensions D x W x H in.	Exterior dimensions D x W x H cm	Shipping weight lb (kg)	Cat. No.
2–8°C (5°C)	326	115 V, 60 Hz (NEMA 5-15)	1 glass	4	Automatic	UL, cUL, CE	21.8 x 20.0 x 52.4	55.4 x 50.8 x 133.1	30.5 x 24.0 x 73.0	77.5 x 61.9 x 185.4	346 (157)	TSG1205GA
		208–230 V, 60 Hz (NEMA 6-15)										TSG1205GD
		208–230 V, 50 Hz (CEE 7/7)										TSG1205GV
2–8°C (5°C)	650	115 V, 60 Hz (NEMA 5-15)	1 glass	4	Automatic	UL, cUL, CE	28.5 x 24 x 58.0	72.3 x 61.0 x 147.3	37.8 x 28.0 x 78.5	96.0 x 71.1 x 199.4	401 (182)	TSG2305GA
		208–230 V, 60 Hz (NEMA 6-15)										TSG2305GD
		208–230 V, 50 Hz (CEE 7/7)										TSG2305GV
2–8°C (5°C)	827	115 V, 60 Hz (NEMA 5-15)	1 glass	4	Automatic	UL, cUL, CE	28.5 x 30.0 x 58.0	72.3 x 76.2 x 147.3	37.3 x 34.0 x 78.5	94.7 x 86.4 x 199.4	434 (197)	TSG3005GA
		208–230 V, 60 Hz (NEMA 6-15)										TSG3005GD
		208–230 V, 50 Hz (CEE 7/7)										TSG3005GV
2–8°C (5°C)	1297	115 V, 60 Hz (NEMA 5-15)	Double sliding glass	8	Automatic	UL, cUL, CE	26 x 52.5 x 58.0	66.0 x 133.4 x 147.3	36.6 x 56.5 x 78.5	93.1 x 143.5 x 199.4	597 (271)	TSG4505GA
		208–230 V, 60 Hz (NEMA 6-15)										TSG4505GD
		208–230 V, 50 Hz (CEE 7/7)										TSG4505GV
2–8°C (5°C)	1447	115 V, 60 Hz (NEMA 5-15)	2 glass	8	Automatic	UL, cUL, CE	28.5 x 52.5 x 58.0	72.4 x 133.4 x 147.3	37.8 x 56.5 x 78.5	96.0 x 143.5 x 199.4	631 (286)	TSG5005GA
		208–230 V, 60 Hz (NEMA 6-15)										TSG5005GD
		208–230 V, 50 Hz (CEE 7/7)										TSG5005GV

# TSG Series solid-door refrigerators



TSG Series solid-door refrigerators are purpose-built through and through to help meet your cold storage needs, offering quiet operation, outstanding performance, and sustainable design.

- Four convenient sizes ranging from 326L to 1447L
- Quiet operation at less than 53dB
- ENERGY STAR–certified refrigerator models
- Heat-free defrost
- Insulated solid doors
- Four 2-inch casters; front casters are lockable
- Self-closing door with 90° stop
- Bright LED interior lighting
- Temperature, door ajar, and power failure alarms
- 12-hour controller battery backup
- Rear access port
- Keyed door locks, compatible with popular E-lock adapters
- Remote alarm contacts
- See pages 6–8 for accessories

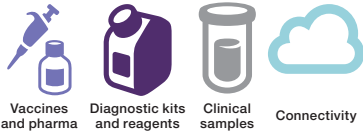


Thermo Scientific™  
TSG1205S Refrigerator

## TSG Series solid-door refrigerators

Temp. range (set point)	Capacity (L)	Electrical plug	Doors	Shelves	Defrost	Certification	Interior dimensions D x W x H in.	Interior dimensions D x W x H cm	Exterior dimensions D x W x H in.	Exterior dimensions D x W x H cm	Shipping weight lb (kg)	Cat. No.
2–8°C (5°C)	326	115 V, 60 Hz (NEMA 5-15)	1 solid	4	Automatic	UL, cUL, CE	21.8 x 20.0 x 52.4	55.4 x 50.8 x 133.1	31.1 x 24.0 x 73.0	79.0 x 61.9 x 185.4	346 (157)	TSG1205SA
		208–230 V, 60 Hz (NEMA 6-15)										TSG1205SD
		208–230 V, 50 Hz (CEE 7/7)										TSG1205SV
2–8°C (5°C)	650	115 V, 60 Hz (NEMA 5-15)	1 solid	4	Automatic	UL, cUL, CE	28.5 x 24 x 58.0	72.3 x 61.0 x 147.3	37.9 x 28.0 x 78.5	96.2 x 71.1 x 199.4	401 (182)	TSG2305SA
		208–230 V, 60 Hz (NEMA 6-15)										TSG2305SD
		208–230 V, 50 Hz (CEE 7/7)										TSG2305SV
2–8°C (5°C)	827	115 V, 60 Hz (NEMA 5-15)	1 solid	4	Automatic	UL, cUL, CE	28.5 x 30.0 x 58.0	72.3 x 76.2 x 147.3	37.9 x 34.0 x 78.5	96.0 x 86.4 x 199.4	434 (197)	TSG3005SA
		208–230 V, 60 Hz (NEMA 6-15)										TSG3005SD
		208–230 V, 50 Hz (CEE 7/7)										TSG3005SV
2–8°C (5°C)	1447	115 V, 60 Hz (NEMA 5-15)	2 solid	8	Automatic	UL, cUL, CE	28.5 x 52.5 x 58.0	72.4 x 133.4 x 147.3	37.9 x 56.5 x 78.5	96.2 x 143.5 x 199.4	631 (286)	TSG5005SA
		208–230 V, 60 Hz (NEMA 6-15)										TSG5005SD
		208–230 V, 50 Hz (CEE 7/7)										TSG5005SV

# TSG Series pharmacy refrigerators



Specialized for clinical and pharmaceutical applications, TSG Series pharmacy refrigerators are purpose-built from the ground up to help meet NSF 456 vaccine storage standards to enable maximum security and temperature stability for vaccines, pharmaceuticals, and other cargo.

- Validated NSF 456 compliance\*
- Four convenient sizes ranging from 326L to 1447L
- Additional independent temperature display probe
- Quiet operation at less than 53 dB
- ENERGY STAR–certified refrigerators
- Heat-free defrost
- Double-pane glass doors
- Four 2-inch casters; front casters are lockable
- Self-closing door with 90° stop
- Bright LED interior lighting
- Temperature, door ajar, and power failure alarms
- 12-hour controller battery backup
- Remote alarm contacts
- Rear access port
- Keyed door locks, compatible with popular E-lock adapters
- See pages 6–8 for accessories



Thermo Scientific™  
TSG2305P Refrigerator



## TSG Series pharmacy refrigerators

Temp. range (set point)	Capacity (L)	Electrical plug	Doors	Basket drawers	Defrost	Certification	Interior dimensions D x W x H in.	Interior dimensions D x W x H cm	Exterior dimensions D x W x H in.	Exterior dimensions D x W x H cm	Shipping weight lb (kg)	Cat. No.
2–8°C (5°C)	326	115 V, 60 Hz (NEMA 5-15)	1 glass	5 wire baskets	Automatic	UL, cUL, CE	21.8 x 20.0 x 52.4	55.4 x 50.8 x 133.1	30.5 x 24.0 x 73.0	77.5 x 61.9 x 185.4	392 (178)	TSG1205PA
		208–230 V, 60 Hz (NEMA 6-15)										TSG1205PD
		208–230 V, 50 Hz (CEE 7/7)										TSG1205PV
2–8°C (5°C)	650	115 V, 60 Hz (NEMA 5-15)	1 glass	6 wire baskets	Automatic	UL, cUL, CE	28.5 x 24 x 58.0	72.3 x 61.0 x 147.3	37.8 x 28.0 x 78.5	96.0 x 71.1 x 199.4	474 (215)	TSG2305PA
		208–230 V, 60 Hz (NEMA 6-15)										TSG2305PD
		208–230 V, 50 Hz (CEE 7/7)										TSG2305PV
2–8°C (5°C)	827	115 V, 60 Hz (NEMA 5-15)	1 glass	6 wire baskets	Automatic	UL, cUL, CE	28.5 x 30.0 x 58.0	72.3 x 76.2 x 147.3	37.3 x 34.0 x 78.5	94.7 x 86.4 x 199.4	516 (234)	TSG3005PA
		208–230 V, 60 Hz (NEMA 6-15)										TSG3005PD
		208–230 V, 50 Hz (CEE 7/7)										TSG3005PV
2–8°C (5°C)	1447	115 V, 60 Hz (NEMA 5-15)	2 glass	12 wire baskets	Automatic	UL, cUL, CE	28.5 x 52.5 x 58.0	72.4 x 133.4 x 147.3	37.8 x 56.5 x 78.5	96.0 x 143.5 x 199.4	789 (358)	TSG5005PA
		208–230 V, 60 Hz (NEMA 6-15)										TSG5005PD
		208–230 V, 50 Hz (CEE 7/7)										TSG5005PV

\*Only applicable for D and A versions

# TSG Series freezers

Thermo Scientific™ TSG Series freezers are designed with your laboratory in mind, combining the performance, security, and quality required for everyday laboratory applications.

- Wide range of sizes from solid door 400L to 1,500L double door
- Whisper-quiet operation <60 dBA
- White painted interior and exterior
- Adaptive defrost
- Temperature, door ajar, and power failure (with battery backup) alarms
- Low heat output
- Rear access port
- Keyed lock
- LED interior lighting
- Green hydrocarbon refrigerants
- Remote alarm contacts



TSG Freezers -12°C to -25°C operating range at set point (-20°C set point)

Model No.	Capacity (L)	Doors	Shelves	Dimensions WxDxH (mm)	Voltage	Energy	Plug Type	Packaging		
TSG400FESBV	400	1 Solid	4	600 x 655 x 1955	230V/ 50Hz	7 kWh/day	EU	Box		
TSG400FESCV								Crate		
TSG400FESBW							UK	Box		
TSG400FESCW								Crate		
TSG700FESBV	700		2 Solid	4		750 x 840 x 2100	230V/ 50Hz	6.6 kWh/day	EU	Box
TSG700FESCV										Crate
TSG700FESBW									UK	Box
TSG700FESCW										Crate
TSG1500FESBV	1500	2 Solid		8	1440 x 825 x 2070	230V/ 50Hz		11 kWh/day	EU	Box
TSG1500FESCV										Crate
TSG1500FESBW									UK	Box
TSG1500FESCW										Crate

## Accessories for TSG Freezers

Cat. No.	Description
SK127	Shelf and 4 shelf clips for TSG400 models
SK135	Shelf and 4 shelf clips for TSG700 and TSG1500 models



# Options and accessories

Productive use of TSG Series refrigerators can be enhanced with options and accessories specifically designed to help improve utility and convenience.

## **Before AA**

Serial number tags on all TSG Series refrigerators and freezers provide the model number and voltage information needed for the accurate selection of available field installation options. Please also refer to the refrigerator and freezer ordering charts in this brochure for model numbers and voltage information.

## **Remote alarm modules**

Free-standing remote alarm modules tie in to the standard remote alarm terminals on the refrigerators and freezers.

## **4–20 milliamp transmitters**

4–20 milliamp transmitters offer a point-to-point circuit to transmit signals from refrigerator and freezer sensors to a controller, sending an analog signal from 4 to 20 milliamps.

## **Temperature chart recorders**

Chart recorders are 6 in. (15.2 cm), constructed with pressure-sensitive paper, and contain seven days per page. One box of 50 charts is included with your order.

## **Seismic restraint kits**

Seismic restraint kits can help provide additional stability for regions prone to earthquakes.

## **E-lock adapter kits**

E-locks provide access control with audit-trail capabilities, as well as temperature monitoring. These kits require no electricity and are available in both factory- and customer-installed options for CompX™, Pyxis™, Omnicell™, and McKesson™ locks.

# Options

For use with refrigerator size:	325 L	650 L	826 L	1,297 L	1,447 L
	Cat. No.				
<b>6 in. 7-day inkless chart recorders, -40°C to +25°C</b>					
Free-standing, customer-installed, 115 V, 60 Hz models			6383-7A		
Free-standing, customer-installed, 208–230 V, 60 Hz models			6383-7D		
Free-standing, customer-installed, 230 V, 50 Hz models (EU)			6383-7V		
Free-standing, customer-installed, 230 V, 50 Hz models (UK)			6383-7W		
Replacement chart paper, box of 50			6184		
<b>Deluxe electronic remote alarm</b>					
Requires a dedicated analog phone line			6224TA		
<b>4–20 milliamp transmitters</b>					
Nonpowered, customer-installed			6907-2		
<b>E-lock adapter kits (does not include locks; single-door models only)</b>					
CompX adapter, customer-installed			CXELAC		
Pyxis glass door adapter, customer-installed			PXELAGC		
Pyxis solid door adapter, customer-installed			PXELASC		
Omnicell glass door adapter, customer-installed			OMELAGC		
Omnicell solid door adapter, customer-installed			OMELASC		
McKesson glass door adapter, customer-installed			MKELAGC		
McKesson solid door adapter, customer-installed			MKELASC		



# Accessories

For use with refrigerator size:	325 L	650 L	826 L	1,297 L	1,447 L
	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
<b>Shelves</b>					
Epoxy-coated, full-size shelf	7125	6696	6695	6696	
Epoxy-coated, half-size shelf		6698	6697	6698	
Stainless steel, full-size shelf	6696-3	6696-1	6695-1	6696-1	6696-1
<b>Roll-out drawers</b>					
Complete set [Cat. No. (Qty)]	7445 (5)	6699 (6)	6704 (6)		6700 (12)
Single drawers	7122	6702	6725		6702
<b>Drawer dividers for roll-out, stainless steel drawers</b>					
4-place divider, order one divider per drawer	7027 (4)	6206 (4)	6963 (5)		6206 (4)
<b>3 in. casters (note: all models ship standard with 2 in.)</b>					
Set of four 3-inch (76 mm) casters				6041-1	
<b>Additional wire basket drawers</b>					
Single drawer, for pharmacy refrigerators	WB12	WB23/50	WB30		WB23/50
<b>Thermo Scientific™ Lab Cooler Module</b>					
Holds twenty-four 1.5 mL tubes and eight 0.5 mL tubes			6736		
<b>Seismic restraint kits</b>					
Basic				TFR210	
For OSHPD	TF-LRF12	TF-LRF23	TF-LRF30	TF-LRF50	TF-LRF50

# Services

TSG Series high-performance refrigerators and freezers are designed to meet UL and CE criteria for safety and performance. All connections must comply with local electrical codes.

Selection charts for each standard model list voltage, rated amperage, recommended circuit breaker size, and NEMA (National Electrical Manufacturers' Association, USA) electrical plug information.

- Most refrigerators are supplied with line cord plugs, which require corresponding receptacles
- Site preparation requires availability of the proper receptacle; a dedicated circuit is required
- Special voltage selections may be available at an extra cost and must be specified when ordering
- For questions regarding site preparation, installation, and electrical connection, contact your sales representative

## Certificate of Calibration

Control, alarm, and temperature recording systems are systematically calibrated at the factory to enable accurate performance. An optional Certificate of Calibration to a NIST™ (National Institute of Standards and Technology, formerly National Bureau of Standards)-traceable instrument includes a model number and serial number certificate (single-point calibration). Calibration certificates must be requested when ordering; for details, contact your sales representative.

## Ordering information

Services description	Cat. No.
Certificate of Calibration	6916-2
Factory quality control test log report	6916-4
Factory quality control test temperature graphs	6916-5

Note: Selected models require Calibration Certificate for NSF 456 vaccine standard labeling.



## Other accessories



### Wireless monitoring

The Thermo Scientific™ Smart-View™ Pro system is a remote monitoring solution for sample processing and storage applications from research to production and patient care. This advanced solution is connected by a secure, long-range, and dedicated network that can enable 21 CFR Part 11–compliant data logging and monitoring of critical parameters across your laboratory equipment.



### Clinical containers

Made with the highest-quality resins, Thermo Scientific™ Nalgene™ bottles are engineered to work together with a proprietary valve seal and a strong, semibuttress thread design. Nalgene bottles offer a leakproof guarantee\*\* because we manufacture and test both components together as part of our routine quality program.



### Gibco media

Gibco™ media, sera, supplements, cells, and cell culture reagents are designed to help deliver reproducibility and performance for results you can count on. Regardless of whether you are performing cell culture in a research lab or production facility, need a special or defined formulation, or are growing cell lines, primary cells, or stem cells, Gibco products offer a reliable solution.

\* This product is not considered a medical device and has not been evaluated for use in environments or applications involving the diagnosis of diseases or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals.

\*\* Our guarantee for a leakproof seal is subject to our standard product warranty, as set forth in the Thermo Fisher Scientific Terms and Conditions of Sale. Our products are leakproof at ambient temperature and pressure when used with their corresponding closures. However, to ensure safe usage, customers are advised to test our containers and closures under conditions of their planned applications. Please contact [technicalsupport@thermofisher.com](mailto:technicalsupport@thermofisher.com) if you need additional information about our products.

Learn more at [thermofisher.com/tsg](https://thermofisher.com/tsg)

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