



Thermo Scientific
General-Purpose and Flammable Storage
Laboratory Refrigerators and Freezers



your samples
our obsession

- Designed for sample protection
- Wide range of capacities
- New cabinets for flammable materials



Thermo Scientific

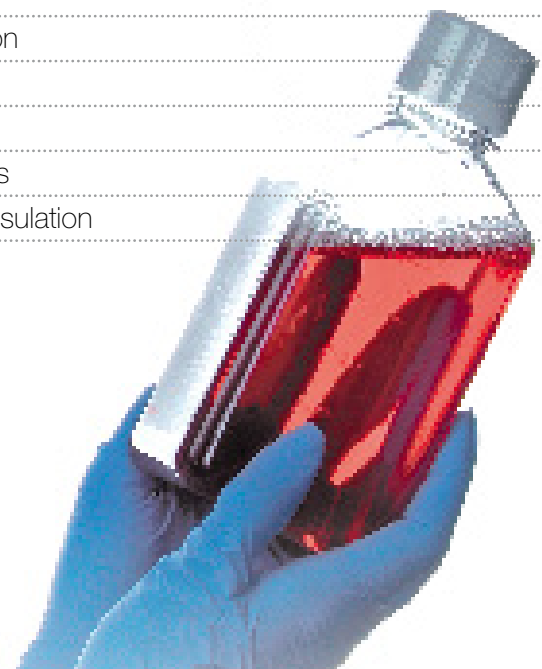
ES Series lab refrigerators and freezers

Designed for routine sample protection where laboratory space is limited

Our new ES Series lab refrigerators, freezers, and combination refrigerator/freezer are the ideal choice when there is limited space in the laboratory.

All ES Series models deliver the sample protection, performance, security, and quality you have come to depend on from us:

- Integrated controller
- Digital display
- High and low temperature alarms
- Door ajar alarm
- Remote alarm contacts
- Standard door locks
- Access ports
- Low energy consumption
- CE marked
- Reversible doors
- Hydrocarbon refrigerants
- HCFC- and CFC-free insulation



Ask your sales representative about Thermo Scientific sample storage systems

NEW Thermo Scientific

ES Series FMS lab refrigerators and freezers

For the storage of potentially flammable materials

Our new ES Series flammable material storage (FMS) laboratory refrigerators and freezers* are ideal for storing ethyl ether, acetone, alcohol, benzene, butane, gasoline, hexane, lacquer solvent and naphtha along with other potentially flammable material in general laboratory locations. Household/commercial refrigerators and freezers are not suitable for such material: They have components in their electrical and refrigeration systems that can trigger explosions of flammable air-vapor mixtures inside the unit.



All ES Series models deliver the sample protection, performance, security, and quality you have come to depend on from us:

- Integrated controller
- Digital display
- High and low temperature alarms
- Door ajar alarm
- Remote alarm contacts
- Standard door locks
- Access ports
- CE/ATEX marking
- Reversible doors
- Hydrocarbon refrigerants
- HCFC- and CFC-free insulation

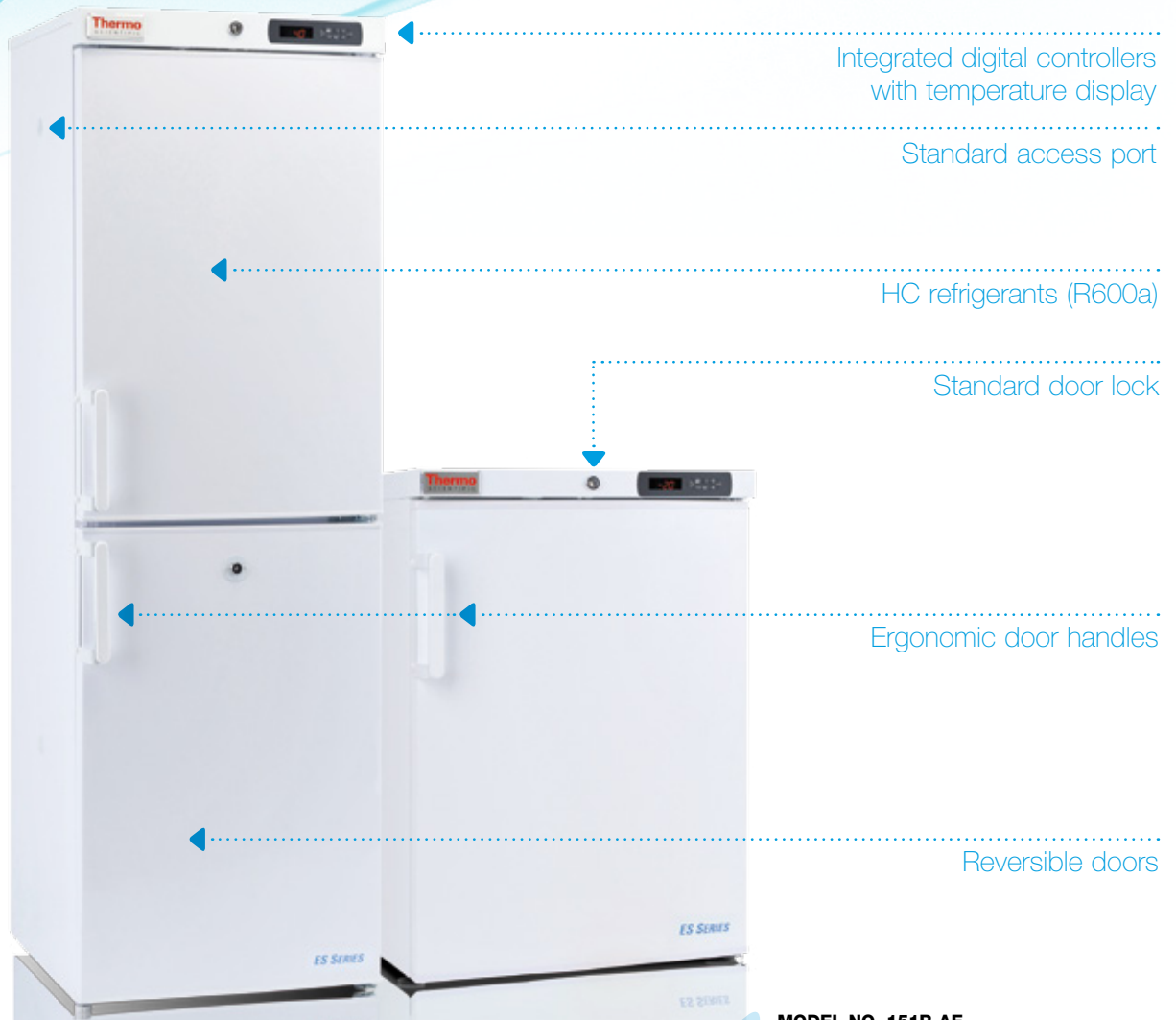
FMS units are designed, evaluated and comply with the ATEX Directive 94/9/EC Annex VIII. These units have an intrinsically safe (IS) barrier installed in the temperature probe circuit with no other internal electrical components that could trigger an explosion or fire of flammable materials inside the unit. The internal wall construction has been reviewed and is not a source for electrostatic build up due to the materials used in construction. The units bear the following ATEX marking:

CE  II 3 G c ic IIB T6X

All of our ES Series models are fitted with standard door locks for enhanced sample security and peace-of-mind.

Our ES Series' integrated digital controller with temperature display, door ajar alarm, and high/low temperature alarms is easy-to-use and maintains the correct cabinet temperature.

Thermo Scientific ES Series models come standard with access ports making integration of secondary monitoring systems simple.



Integrated digital controllers with temperature display

Standard access port

HC refrigerants (R600a)

Standard door lock

Ergonomic door handles

Reversible doors

MODEL NO. 263C-AE, combination lab refrigerator and freezer. See pages 6-7 for specifications and ordering information.

MODEL NO. 151R-AE, 151 litre lab refrigerator. See pages 6-7 for specifications and ordering information.

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GPS Series lab refrigerators and freezers

Medium and large capacities designed for routine sample protection

With capacities ranging from space-saving to spacious our new GPS Series lab refrigerators and freezers meet the demands of today's laboratory requirements. All models contain sample protection features designed for the rigorous demands of the laboratory environment.

All GPS Series models deliver the sample protection performance, security, and quality you have come to depend on from us:

- Integrated controller
- Digital display
- High and low temperature alarms
- Door ajar alarm
- Remote alarm contacts
- Standard door locks
- Standard casters
- Access ports
- Low energy consumption
- Choice of glass or solid door (refrigerators only)
- Forced air circulation
- Automatic defrost
- CE marked
- Reversible doors (R/F 400 and R/F 700 modules only)
- HCFC- and CFC-free insulation
- Interior fluorescent lighting

Ask your sales representative about
Thermo Scientific sample storage systems

All of our GPS Series lab refrigerators and freezers are fitted with standard door locks for peace-of-mind.

Our GPS Series' integrated digital controller with temperature display, door ajar alarm, and high/low temperature alarms is easy-to-use and maintains the correct cabinet temperature.

Thermo Scientific GPS Series models come standard with access ports making integration of secondary monitoring systems simple.



MODEL NO. R700-GAE,
700 litre glass door
lab refrigerator. See
pages 6-7 for ordering
information.

MODEL NO. F700-SAE,
700 litre lab freezer.
See pages 6-7 for
ordering information.

ES Series lab refrigerators and freezers

SPECIFICATIONS TABLE AND ORDERING INFORMATION



Thermo Scientific ES Series Lab Refrigerators (Temperature Range: +1°C to +10°C)**

Model No.	Capacity (Litres)*	Voltage	Plug Type	Includes	Defrost Type
151R-AEV-TS	151	230V/50Hz	EU	3 shelves, 1 basket	automatic
288R-AEV-TS	288	230V/50Hz	EU	5 shelves, 1 basket	automatic

Model No.	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
151R-AEV-TS	0.6 kWh/day	500 x 450 x 705	595 x 595 x 845	65 (143)
288R-AEV-TS	0.5 kWh/day	480 x 445 x 1382	595 x 634 x 1570	90 (198)

Thermo Scientific ES Series Lab Freezers (Temperature Range: -18°C to -25°C)**

Model No.	Capacity (Litres)	Voltage	Plug Type	Includes	Defrost Type
151F-AEV-TS	151	230V/50Hz	EU	3 baskets	manual
232F-AEV-TS	232	230V/50Hz	EU	2 shelves, 3 baskets	manual

Model No.	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
151F-AEV-TS	1.6 kWh/day	500 x 450 x 705	595 x 595 x 845	65 (143)
232F-AEV-TS	1.0 kWh/day	437 x 430 x 1300	595 x 634 x 1570	85 (187)

Thermo Scientific ES Series Combination Lab Refrigerator/Freezer (Temperature Range Ref.: +1°C to +10°C, Frz.: -18°C to -25°C)**

Model No.	Capacity (Litres)*	Voltage	Plug Type	Includes	Defrost Type
263C-AEV-TS	159 ref / 104 frz	230V/50Hz	EU	3 shelves, 2 half baskets / 1 shelf, 2 baskets (frz)	automatic (ref), manual (frz)

Model No.	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
263C-AEV-TS	0.9 kWh/day	457 x 450 x 725 ref / 408 x 415 x 670 frz	540 x 600 x 1680	95 (209)

* Published interior volumes are nominal; usable litre capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application.

**Temperature range is the spectrum of temperature within the refrigerator or freezer under standard operation.

*** Internal performance data; data on file. January, 2012.

ES Series FMS lab refrigerators and freezers

SPECIFICATIONS TABLE AND ORDERING INFORMATION



Thermo Scientific ES Series FMS Lab Refrigerators (Temperature Range: +1°C to +10°C)**

Model No.	Capacity (Litres)*	Voltage	Plug Type	Includes	Defrost Type
151R-AXV-TS	151	230V/50Hz	EU	3 shelves, 1 basket	manual
288R-AXV-TS	288	230V/50Hz	EU	5 shelves, 1 basket	manual

Model No.	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
151R-AXV-TS	0.6 kWh/day	500 x 450 x 705	595 x 595 x 845	65 (143)
288R-AXV-TS	0.5 kWh/day	480 x 445 x 1382	595 x 634 x 1570	90 (198)

Thermo Scientific ES Series FMS Lab Freezers (Temperature Range: -18°C to -25°C)**

Model No.	Capacity (Litres)*	Voltage	Plug Type	Includes	Defrost Type
151F-AXV-TS	151	230V/50Hz	EU	3 baskets	manual
232F-AXV-TS	232	230V/50Hz	EU	2 shelves, 3 baskets	manual

Model No.	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
151F-AXV-TS	1.6 kWh/day	500 x 450 x 705	595 x 595 x 845	65 (143)
232F-AXV-TS	1.0 kWh/day	437 x 430 x 1300	595 x 634 x 1570	85 (187)

Thermo Scientific ES Series FMS Combination Lab Refrigerator/Freezer (Temperature Range Ref.: +1°C to +10°C, Frz.: -18°C to -25°C)**

Model No.	Capacity (Litres)*	Voltage	Plug Type	Includes	Defrost Type
263C-AXV-TS	159 ref / 104 frz	230V/50Hz	EU	3 shelves, 2 half baskets / 1 shelf, 2 baskets (frz)	manual (ref), manual (frz)

Model No.	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
263C-AXV-TS	0.9 kWh/day	457 x 450 x 725 ref / 408 x 415 x 670 frz	540 x 600 x 1680	95 (209)

* Published interior volumes are nominal; usable litre capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application.

**Temperature range is the spectrum of temperature within the refrigerator or freezer under standard operation.

*** Internal performance data; data on file. January, 2012.

FMS units are not designed for use in Class 1, Zone 0 or Zone 1 applications which require an explosion-proof unit.

GPS Series lab refrigerators and freezers

SPECIFICATIONS TABLE AND ORDERING INFORMATION



Thermo Scientific GPS Series Lab Refrigerators (Temperature Range: +1°C to +11°C)**

Model No.	Capacity (Litre)*	Voltage	Door Type	Plug Type	Includes	Defrost Type
R400-SAEV-TS	400	230V/50Hz	solid	EU	3 shelves	automatic
R400-GAEV-TS	400	230V/50Hz	glass	EU	3 shelves	automatic
R700-SAEV-TS	700	230V/50Hz	solid	EU	3 shelves	automatic
R700-GAEV-TS	700	230V/50Hz	glass	EU	3 shelves	automatic
R14X-SAEV-TS	1400	230V/50Hz	solid	EU	6 shelves	automatic
R14X-GAEV-TS	1400	230V/50Hz	glass	EU	6 shelves	automatic

Model No.	Capacity (Litre)*	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
R400-SAEV-TS	400	3.1 kWh/day	480 x 500 x 1150	600 x 642 x 1822	95 (209)
R400-GAEV-TS	400	3.6 kWh/day	480 x 500 x 1150	600 x 642 x 1822	120 (265)
R700-SAEV-TS	700	3.4 kWh/day	600 x 660 x 1300	700 x 817 x 1972	130 (287)
R700-GAEV-TS	700	5.3 kWh/day	600 x 660 x 1300	700 x 817 x 1972	120 (265)
R14X-SAEV-TS	1400	2.6 kWh/day	1300 x 660 x 1300	1400 x 817 x 1972	190 (419)
R14X-GAEV-TS	1400	7.7 kWh/day	1300 x 660 x 1300	1400 x 817 x 1972	190 (419)

Thermo Scientific GPS Series Lab Freezers (Temperature Range: -12°C to -25°C)**

Model No.	Capacity (Litre)*	Voltage	Door Type	Plug Type	Includes	Defrost Type
F400-SAEV-TS	400	230V/50Hz	solid	EU	3 shelves	automatic
F700-SAEV-TS	700	230V/50Hz	solid	EU	3 shelves	automatic
F14X-SAEV-TS	1400	230V/50Hz	solid	EU	6 shelves	automatic

Model No.	Capacity (Litre)	Energy Consumption***	Internal Dimensions W x D x H (mm)	External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
F400-SAEV-TS	400	10.1 kWh/day	480 x 500 x 1150	600 x 642 x 1822	95 (209)
F700-SAEV-TS	700	10.6 kWh/day	600 x 660 x 1300	700 x 817 x 1972	130 (287)
F14X-SAEV-TS	1400	12.0 kWh/day	1300 x 660 x 1300	1400 x 817 x 1972	200 (441)

* Published interior volumes are nominal; usable litre capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representative. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representative for specific inquiries regarding your application.

**Temperature range is the spectrum of temperature within the refrigerator or freezer under standard operation.

*** Internal performance data; data on file, January, 2012.

Thermo Scientific GPS Series Shelf Kits

Model No.	For GPS Series	Includes
GPS400/SH	400 litre	One shelf with set of clips
GPS714/SHG	700, 1400 litre	One shelf with metal guides

Also available for your cold storage applications

Thermo Scientific plastic and glass labware offer a complete range of tubes, bottles, flasks and vials for all of your cold storage applications. Our labware products are designed and manufactured for tough applications under rigorous laboratory conditions. For more information, visit www.thermoscientific.com/labwareandsupplies



Thermo Scientific Smart-Vue is a complete and simplified wireless monitoring solution to monitor critical samples stored inside your lab refrigerator or freezer. Smart-Vue monitor features audit trail traceability to assist with conformance to 21 CFR part 11 and other regulatory requirements while safeguarding critical samples. Smart-Vue is not available in all Radio Frequency (RF) regions; for more information, visit www.thermoscientific.com/smartvue.

