



# General-Purpose and Flammable Storage Lab Refrigerators and Freezers

- Designed for sample protection
- Wide range of capacities
- ATEX certified spark-free cabinets for flammable material storage

# Thermo Scientific ES Series Lab Refrigerators and Freezers

## ES Series

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

# Thermo Scientific ES Series ATEX certified spark-free lab refrigerators and freezers

## For the storage of potentially flammable materials

Our Thermo Scientific™ ES Series ATEX Certified Spark-free Lab 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 For the storage of potentially flammable materials 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
- Certified spark-free
- Reversible doors
- Hydrocarbon refrigerants
- HCFC- and CFC-free insulation

\* Certified spark-free 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.



II 3 G c ic IIB T6X

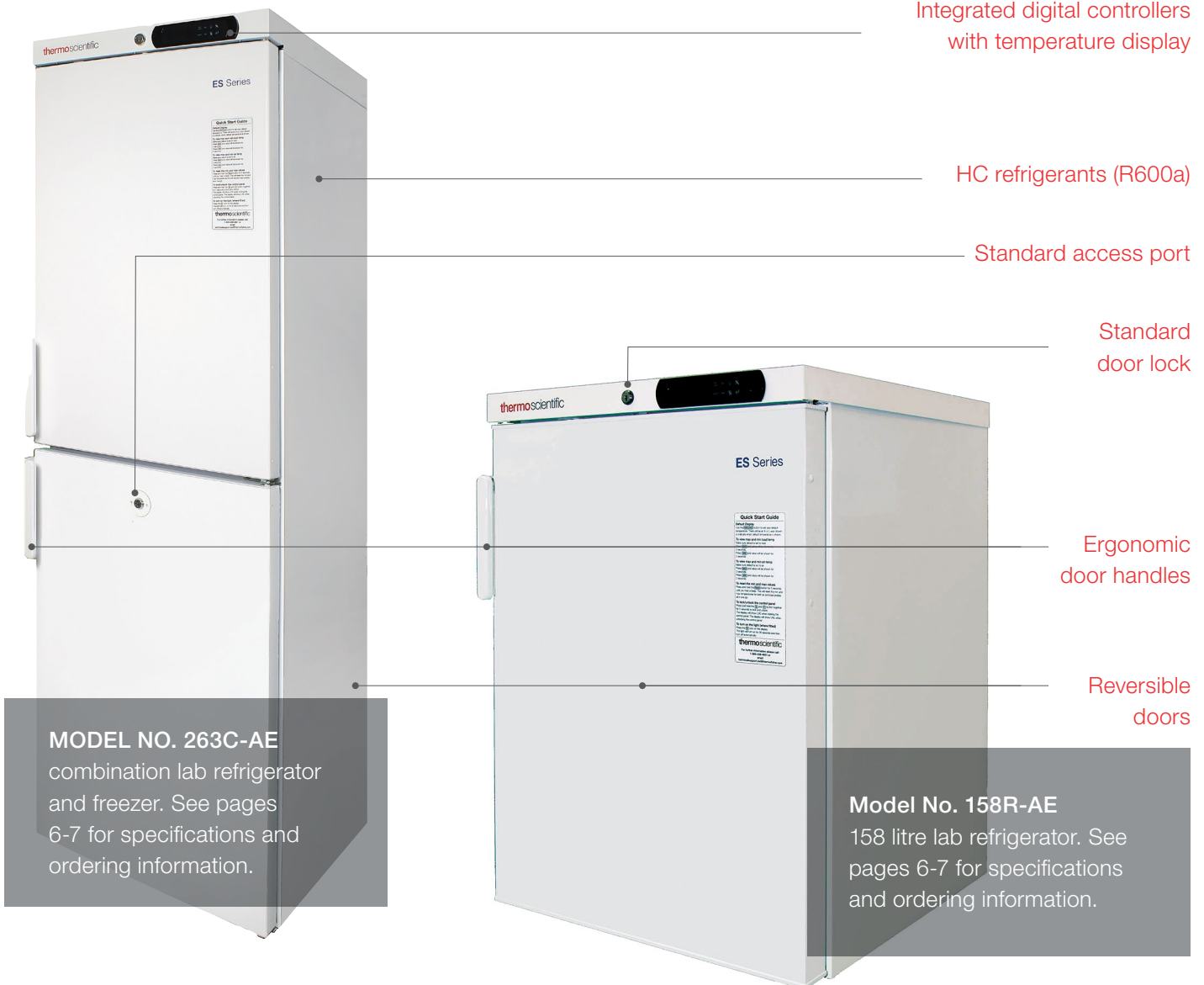
# ES Series Certified Spark-Free



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.



# Thermo Scientific ES Series lab refrigerators and freezers

TSC models are shipped in a robust wooden crate, ideal for long-haul and multiple-stop shipping.



158R-AEV-TX/158 Litre (ref)



98F-AEV-TS/98 Litre (frz)



288R-AEV-TS / 288 Litre (ref)



232F-AEV-TS / 232 Litre (frz)



263C-AEV-TS / 159 Litre (ref), 109 Litre (frz)

## Specifications table and ordering information

ES Series Lab Refrigerators Operating Temperature Range: +1°C to +10°C (Set Point Adjustment Range +4°C to +6°C)**					
Model No.	Capacity (Litre)*	Voltage	Plug Type****	Includes	Defrost Type
158R-AEV-TS	158	230V/50Hz	EU	3 Shelves, 1 Basket	Automatic
158R-AEV-TSC	158	230V/50Hz	EU	3 Shelves, 1 Basket	Automatic
288R-AEV-TS	288	230V/50Hz	EU	Auto	Manual
288R-AEV-TSC	288	230V/50Hz	EU	Auto	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)
158R-AEV-TS	.3 kWh/day	500 x 480 x 718		559 x 658 x 850	38
158R-AEV-TSC	.3kWh/day	500 x 480 x 718		559 x 658 x 850	57
288R-AEV-TS	.4 kWh/day	420 x 440 x 650		559 x 658 x 850	42
288R-AEV-TSC	.4kWh/day	420 x 440 x 650		559 x 658 x 850	61
ES Series Lab Freezers Operating Temperature Range: -18°C to -25°C (Set Point Adjustment Range -19°C to -21°C)**					
Model No.	Capacity (Litre)*	Voltage	Plug Type****	Includes	Defrost Type
98F-AEV-TS	98	230V/50Hz	EU	3 Glass Shelves/Plastic Drawers	Manual
98F-AEV-TSC	98	230V/50Hz	EU	3 Glass Shelves/Plastic Drawers	Manual
232F-AEV-TS	232	230V/50Hz	EU	2 Shelves, 3 baskets	Manual
232F-AEV-TSC	232	230V/50Hz	EU	2 Shelves, 3 baskets	Manual
Model No.	Energy Consumption***	Internal Dimensions W x D		External Dimensions W x D x H (mm)	Shipping Weight kg (lbs)
98F-AEV-TS	.4 kWh/day	420 x 440 x 650		559 x 658 x 850	38
98F-AEV-TSC	.4kWh/day	420 x 440 x 650		559 x 658 x 850	57
232F-AEV-TS	1.0 kWh/day	437 x 430 x 1300		595 x 634 x 1570	85
232F-AEV-TSC	1.0 kWh/day	437 x 430 x 1300		595 x 634 x 1570	85
ES Series Combination Lab Refrigerator/Freezer (Set Point Adjustment Range: Ref +4°C to +6°C; Frz -19°C to -21°C)					
Model No.	Capacity (Litre)*	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)
263C-AEV-TSC	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)
263C-AEV-TSC	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. All refrigerators/combo refrigerators are factory set at +5°C and freezers/combo freezers at -20°C.

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

\*\*\*\* All models shipped to the UK will be supplied with a UK plug adapter.

# Thermo Scientific ES Series ATEX certified spark-free lab refrigerators and freezers

TSC models are shipped in a robust wooden crate, ideal for long-haul and multiple-stop shipping.



158R-AXV-TS/158 Litre (ref)

98F-AXV-TS/98 Litre (frz)

288R-AXV-TS / 288 Litre (ref)

232F-AXV-TS / 232 Litre (frz)

263C-AXV-TS / 159 Litre (ref), 109 Litre (frz)

## Specifications table and ordering information

### ES Series ATEX Certified Spark-Free Lab Refrigerators Operating Temp. Range: +1°C to +10°C (Set Point Adjustment Range +4°C to +6°C)\*\*

Model No.	Capacity (Litre)*	Voltage	Plug Type****	Includes	Defrost Type
158R-AXV-TS	158	230V/50Hz	EU	3 Shelves, 1 Basket	Automatic
158R-AXV-TSC	158	230V/50Hz	EU	3 Shelves, 1 Basket	Automatic
288R-AXV-TS	288	230V/50Hz	EU	Auto	Manual
288R-AXV-TSC	288	230V/50Hz	EU	Auto	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)
158R-AXV-TS	.3 kWh/day	500 x 480 x 718	559 x 658 x 850	38
158R-AXV-TSC	.3kWh/day	500 x 480 x 718	559 x 658 x 850	57
288R-AXV-TS	.5 kWh/day	480 x 445 x 1382	595 x 634 x 1570	90
288R-AXV-TSC	.5 kWh/day	480 x 445 x 1382	595 x 634 x 1570	90

### ES Series ATEX Certified Spark-Free Lab Freezers Operating Temp. Range: -18°C to -25°C (Set Point Adjustment Range -19°C to -21°C)\*\*

Model No.	Capacity (Litre)*	Voltage	Plug Type****	Includes	Defrost Type
98F-AXV-TS	98	230V/50Hz	EU	3 Glass Shelves/Plastic Drawers	Manual
98F-AXV-TSC	98	230V/50Hz	EU	3 Glass Shelves/Plastic Drawers	Manual
232F-AXV-TS	232	230V/50Hz	EU	2 Shelves, 3 Baskets	Manual
232F-AXV-TSC	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)
98F-AXV-TS	.4 kWh/day	420 x 440 x 650	559 x 658 x 850	42
98F-AXV-TSC	.4kWh/day	420 x 440 x 650	559 x 658 x 850	61
232F-AXV-TS	1.0 kWh/day	437 x 430 x 1300	595 x 634 x 1570	85
232F-AXV-TSC	1.0 kWh/day	437 x 430 x 1300	595 x 634 x 1570	85

### ES Series ATEX Certified Spark-Free Combi Lab Refrigerator/Freezer (Set Point Adjustment Range: Ref +4°C to +6°; Frz -19°C to -21°C)

Model No.	Capacity (Litre)*	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)	automatic (ref), manual (frz)
263C-AXV-TSC	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-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)
263C-AXV-TSC	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. All refrigerators/combo refrigerators are factory set at +5°C and freezers/combo freezers at -2.\*\*\* Internal performance data; data on file. January, 2012. \*\*\*\* All models shipped to the UK will be supplied with a UK plug adapter.

# Thermo Scientific 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



# GPS Series



All of our GPS Series models are fitted with standard door locks for enhanced sample security and 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.



Integrated controller with digital temperature display

Standard door lock

Standard access port

Interior lighting (refrigerators only)

Glass or solid door (glass available on refrigerators only)

Reversible doors (R/F 400 and R/F 700 models only)

**MODEL NO. R700-GAE**  
700 litre glass door lab refrigerator. See page 8 for specifications and ordering information.

**MODEL NO. F700-SAE**  
700 litre lab freezer. See page 8 for specifications and ordering information.

Standard casters



# Thermo Scientific GPS Series lab refrigerators and freezers

GPS Series: TSC models are shipped in a robust wooden crate, ideal for long-haul and multiple-stop shipping.



## Specifications table and ordering information

GPS Series Lab Refrigerators (Operational/Settable Temperature Range +1°C to +11°C, factory set point 5°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-SAEV-TSC	400	230V/50Hz	solid	EU	3 Shelves	automatic
R400-GAEV-TS	400	230V/50Hz	glass	EU	3 Shelves	automatic
R400-GAEV-TSC	400	230V/50Hz	glass	EU	3 Shelves	automatic
R700-SAEV-TS	700	230V/50Hz	solid	EU	3 Shelves	automatic
R700-SAEV-TSC	700	230V/50Hz	solid	EU	3 Shelves	automatic
R700-GAEV-TS	700	230V/50Hz	glass	EU	3 Shelves	automatic
R700-GAEV-TSC	700	230V/50Hz	glass	EU	3 Shelves	automatic
R14X-SAEV-TS	1400	230V/50Hz	solid	EU	6 Shelves	automatic
R14X-SAEV-TSC	1400	230V/50Hz	solid	EU	6 Shelves	automatic
R14X-GAEV-TS	1400	230V/50Hz	glass	EU	6 Shelves	automatic
R14X-GAEV-TSC	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-SAEV-TSC	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)	
R400-GAEV-TSC	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-SAEV-TSC	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)	
R700-GAEV-TSC	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-SAEV-TSC	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)	
R14X-GAEV-TSC	1400	7.7 kWh/day	1300 x 660 x 1300	1400 x 817 x 1972	190 (419)	

\* 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. \*\*\*\* All models shipped to the UK will be shipped with a UK plug adapter.

**GPS Series Lab Freezers (Operational/Settable Temperature Range -12°C to -25°C, factory set point -20°C)\*\***

Model No.	Capacity (Litre)*	Voltage	Door Type	Plug Type****	Includes	Defrost Type
F400-SAEV-TS	400	230V/50Hz	solid	EU	3 Shelves	automatic
F400-SAEV-TSC	400	230V/50Hz	solid	EU	3 Shelves	automatic
F700-SAEV-TS	700	230V/50Hz	solid	EU	3 Shelves	automatic
F700-SAEV-TSC	700	230V/50Hz	solid	EU	3 Shelves	automatic
F14X-SAEV-TS	1400	230V/50Hz	solid	EU	6 Shelves	automatic
F700-SAEV-TSC	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)
F400-SAEV-TSC	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)
F700-SAEV-TSC	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)
F14X-SAEV-TSC	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. \*\*\*\* All models shipped to the UK will be shipped with a UK plug adapter.

## 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 [thermofisher.com/labwareandsupplies](https://thermofisher.com/labwareandsupplies)

Thermo Scientific™ Smart-Vue™ Wireless Monitoring Solution is a complete and simplified way 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 [thermoscientific.com/smartvue](https://thermoscientific.com/smartvue).

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

