## **Technical Data Sheet**

## High Performance Plasma Freezer

Revision: 3

Thermo Fisher Scientific, Asheville, North Carolina

| Specifications   Model Number   TSX5030LV   Application, Rating and Electrical Data  | ds  |  |  |  |  |
|--|---|--|--|--|--|
| Application Application Plasma Storage (non-flammable) Freezer  Storage Volume 1447 Liters / 51.1 Cubic Feet 3.0°C  Set Point 3.0°C  Set Point Range/Adjustable Increment Electrical Power / Rated Current Building Supply Rating 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cold Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cold Length 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cold Air Lounded Power Plug/Power Plug/Power Power Plug/Power Plug/Power Power Plug/Power Power Plug/Power Power Plug/Power Plug/Powe | ds  |  |  |  |  |
| Application, Rating and Electrical Data  Application  Application  Application  Application  Plasma Storage (non-flammable) Freezer  Storage Volume  Factory Set Point  Set Point Range/Adjustable Increment  Electrical Power / Rated Current  Building Supply Rating  15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length  Agency Listings  Indoor/Outdoor Usage  Application Environment  Ambient Operating Temperature  Refrigeration System  Compressor / Number / Capacity  Condenser Type/Number  Evaporator Type / Defrost Method  Refrigerant Charge / Flammability  Refrigerant Charge / Flammability  Refrigerant Charge / Flammability  Controller Level  Power Switch  Compressor Safe Guard  Control Sansor  Connectivity / Remote Outputs  Adjustable Warm / Cold Alarms  Power Failure Alarm  Electronic Chart Recorder  Dimensions and Construction   | ds  |  |  |  |  |
| Application Plasma Storage (non-flammable) Freezer  Storage Volume 1447 Liters / 51.1 Cubic Feet Factory Set Point - 30°C  Set Point Range/Adjustable Increment -35°C to -15°C / 0.1°C  Electrical Power / Rated Current -208-230V 50 Hz 1 Phase / 9.6A  Building Supply Rating 15A dedicated grounded non-GFC Liver Protected by circuit breaker rated for inductive load Power Plug/Power Cord Length 16 Amp (CEE 7/7) / 3.048 Meters (10 feet)  Agency Listings - CE, UL, cUL, FDA Indoor/Outdoor Usage Indoor Ind | ds  |  |  |  |  |
| Storage Volume Factory Set Point Set Point Range/Adjustable Increment Flectrical Power / Rated Current Flectrical Power Plug/Power Cord Length Flower Plug/Power Cord Air Ventilation Flower Flower Plug/Power Plug/Flower Plug/Power P | ds  |  |  |  |  |
| Storage Volume Factory Set Point Set Point Range/Adjustable Increment Electrical Power / Rated Current Electrical Power / Rated Current Building Supply Rating Power Plug/Power Cord Length Agency Listings Indoor/Outdoor Usage Application Environment Ambient Operating Temperature  Refrigeration System Compressor / Number / Capacity Condenser Type/Number Expansion Device Expansion Device Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability Refrigeration System Controller/Electrical System Controller/Electrical System Controller Type Condenser Stepoint Section Refrigerant Charge / Flammabile Refrigeration Configuration and Features Refrigeration Configuration and Features Refrigeration Configuration and Features Refrigeration Configuration and Features Refrigeration Configuration Configuration and Features Refrigeration Configuration Refrigeration Configuration Refriger | ds  |  |  |  |  |
| Set Point Range/Adjustable Increment Electrical Power / Rated Current Electrical Power / Rated Current Building Supply Rating Power Plug/Power Cord Length Agency Listings Indoor/Outdoor Usage Indoor/Outdoor Usage Application Environment Ambient Operating Temperature  Refrigeration System Compressor / Number / Capacity Condenser Type/Number Exaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability Refrigerant Switch Controller Level Power Switch Compressor Safe Guard Connectivity / Programmable Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Faillure Alarm Electronic Chart Recorder  Pisc C - 35°C to -15°C / 0.1°C 208-230V 50 Hz 1 Phase / 9.6A 209-230V 50 Hz  | ds  |  |  |  |  |
| Electrical Power / Rated Current Building Supply Rating Power Plug/Power Cord Length Agency Listings Indoor/Outdoor Usage Application Environment Ambient Operating Temperature  Refrigeration System Compressor / Number / Capacity Condenser Type/Number Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability Refrigeration System Controller Level Power Switch Controller Type Setpoint Security / Programmable Connectivity / Programmable Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electroic Chart Recorder  Building Supply Rating 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load 15A dedicated grounded non-GFCI circuit. Protected by circuit breaker rated for inductive load 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16A mp (CEE 7/7) / 3.048 Meters (10 feet) 16B mp (Colf 7/2) 16 | ds  |  |  |  |  |
| Building Supply Rating Power Plug/Power Cord Length Agency Listings Indoor/Outdoor Usage Application Environment Ambient Operating Temperature Refrigeration System Compressor / Number / Capacity Condenser Type/Number Expansion Device Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability Refrigerant Controller Level Power Switch Controller Type Connectivity / Programmable Control Sensor Setpoint Security / Programmable Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder  155 C - 777 / 3.048 Meters (10 feet) Refrigeration (CEE 777) / 3.048 Meters (10 feet) Refrigeration (CEE 777) / 3.048 Meters (10 feet) Refrigeration Coulty (CUL), FDA Indoor/Use Only Refrosor Non-Explosive, Good Air Ventilation Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation Refrigeration Configuration Vapor compression system Compressor / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 Expansion Device Expansion Device Enhanced Finned-Tube and Forced-Air Cooled / 1 Expansion Valve Evaporator Cool / Automatic Defrost Refrigerant Charge / Flammability Refrigerator Coolid / Automatic Defrost S Refrigerant Charge / Flammability Refrigeration Configuration and Features Eye Level Power Switch Refrigeration Configuration | ds  |  |  |  |  |
| Power Plug/Power Cord Length Agency Listings CE, UL, cUL, FDA Indoor/Outdoor Usage Application Environment Ambient Operating Temperature  Refrigeration System Compressor / Number / Capacity Condenser Type/Number Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability Controller Level Power Switch Controller Level Controller Security / Programmable Compressor Safe Guard Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Agency Listings CE, UL, cUL, FDA Indoor Use Only Indoor Use Only Indoor Use Only Refrigerantable, Non-Explosive, Good Air Ventilation Indoor Use Only Refrigeration Configuration Control System Compressor Ale Good Air Ventilation Ambient Use Only Refrigeration Control System Configuration Control System Configuration Control System Configuration and Features Eye Level Reyed Off-On - Alarm Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost System Configuration Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Fully Adjustable Power Failure Alarm Standard Electronic Chart Recorder Dimensions and Construction  | ds  |  |  |  |  |
| Agency Listings Indoor/Outdoor Usage Application Environment Ambient Operating Temperature Refrigeration System Compressor / Number / Capacity Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigeration Configuration Valve Refrigeration Configuration Valve Refrigeration Configuration Refrigeration Co |   |  |  |  |  |
| Indoor/Outdoor Usage Application Environment Ambient Operating Temperature  Refrigeration System Compressor / Number / Capacity Expansion Device Evaporator Type / Defrost Method Refrigerant Charge / Flammability Controller Level Power Switch Controller Type Controller Type Compressor Safe Guard Control Sensor Compressor Safe Guard Adjustable Warm / Cold Alarms Power Failure Alarm Ambient Operating Temperature  Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation  Refrigeration Configuration Vapor compressor / 1 / 672W Refrigeration Configuration Vapor compressor / 1 / 672W Condenser Type/Number Enhanced Finned-Tube and Forced-Air Cooled / 1 Expansion Valve Enhanced Finned-Tube and Forced-Air Cooled / 1 Expansion Valve Enhanced Finned-Tube and Forced-Air Cooled / 1 Expansion Valve Evaporator Coil / Automatic Defrost Refrigerant Charge / Flammability Reyeo (315 gms, GWP:3 ODP:0 / Flammable Controller/Electrical System Configuration and Features Eye Level Eye Level Eye Level Found System: Digital Display, Graphic Thermometer, Automatic Defrost S Compressor Safe Guard Current protection Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Standard Electronic Chart Recorder Standard Dimensions and Construction  |   |  |  |  |  |
| Application Environment Ambient Operating Temperature  15° C - 32° C (60° F - 90° F)  Refrigeration Configuration  Refrigeration System Compressor / Number / Capacity Condenser Type/Number Expansion Device Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability  Controller Level Power Switch Controller Type Setpoint Security / Programmable Compressor Safe Guard Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder  Non-Corrosive, Non-Flammable, Non-Explosive, Good Air Ventilation 15° C - 32° C (60° F - 90° F) Refrigeration Configuration Refrigeration Configuration Vapor compression system Paper Switch Porcad Air Evaporator Coil / Automatic Defrost Refrigerant Charge / Flammability Regod, 135 gms, GWP:3 ODP:0 / Flammable Controller/Electrical System Configuration and Features Eye Level Power Switch Reyed Off-On - Alarm Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Fully Adjustable Power Failure Alarm Standard Electronic Chart Recorder Dimensions and Construction   |   |  |  |  |  |
| Ambient Operating Temperature  15° C - 32° C (60° F - 90° F)  Refrigeration Configuration  Refrigeration System  Compressor / Number / Capacity  Condenser Type/Number  Expansion Device  Evaporator Type / Defrost Method  Refrigerant Charge / Flammability  Controller Level  Power Switch  Controller Type  Controller Type  Controller Sepansion  Controller Sessor  Setpoint Security / Programmable  Control Sensor  Connectivity / Remote Outputs  Adjustable Warm / Cold Alarms  Power Failure Alarm  Electronic Chart Recorder  Refrigeration Configuration  Napor compressor system  Lepressor Ale Frequency  Paper Switch  Refrigeration Configuration and Features  Refrigeration Configuration and Features  Eye Level  Rego, 135 gms, GWP:3 ODP:0 / Flammable  Controller/Electrical System Configuration and Features  Eye Level  Rego Off-On - Alarm  Controller Type  IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost Section of Control Sensor  Single RTD (1000 ohm shielded Platinum RTD)  Connectivity / Remote Outputs  Adjustable Warm / Cold Alarms  Fully Adjustable  Power Failure Alarm  Electronic Chart Recorder  Dimensions and Construction  |   |  |  |  |  |
| Refrigeration Configuration  Refrigeration System  Compressor / Number / Capacity  Condenser Type/Number  Expansion Device  Evaporator Type / Defrost Method  Refrigerant Charge / Flammability  Controller Level  Power Switch  Controller Type  Controller Type  Compressor Safe Guard  Control Sensor  Control System  Control System  Control Sensor  Connectivity / Remote Outputs  Adjustable Warm / Cold Alarms  Power Failure Alarm  Standard  Electronic Chart Recorder  Refrigeration Configuration  Vapor compression system  Enhanced Finenet-Tube and Forced-Air Cooled / 1  Enhanc |   |  |  |  |  |
| Refrigeration System Compressor / Number / Capacity Condenser Type/Number Expansion Device Evaporator Type / Defrost Method Refrigerant Charge / Flammability Refrigerant Charge / Flammability Controller Level Power Switch Controller Type Controller Sequent Seque |   |  |  |  |  |
| Compressor / Number / Capacity Condenser Type/Number Enhanced Finned-Tube and Forced-Air Cooled / 1 Expansion Device Thermal Expansion Valve Evaporator Type / Defrost Method Refrigerant Charge / Flammability R290, 135 gms, GWP:3 ODP:0 / Flammable Controller Level Power Switch Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost Setpoint Security / Programmable Control Sensor Control Sensor Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Enhanced Finned-Tube and Forced-Air Cooled / 1 / 672W Evaporator Coil / Automatic Defrost Eye Level Eye Le |   |  |  |  |  |
| Condenser Type/Number Expansion Device Thermal Expansion Valve Evaporator Type / Defrost Method Refrigerant Charge / Flammability R290, 135 gms, GWP:3 ODP:0 / Flammable Controller Level Power Switch Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost Setpoint Security / Programmable Control Sensor Control Sensor Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder Enhanced Finned-Tube and Forced-Air Cooled / 1 Thermal Expansion Valve Forced Air Evaporator Coil / Automatic Defrost R290, 135 gms, GWP:3 ODP:0 / Flammable Controller Eveture R290, 135 gms, GWP:3 ODP:0 / Flammable Controller Eveture Configuration and Features Eye Level Reyed Off-On - Alarm Fully Agination Thermometer, Automatic Defrost Setpoint Security / Programmable Compressor Safe Guard Current protection Connectivity / Remote Outputs Standard Fully Adjustable Power Failure Alarm Standard Electronic Chart Recorder Dimensions and Construction  |   |  |  |  |  |
| Expansion Device  Evaporator Type / Defrost Method  Refrigerant Charge / Flammability  Refrigerant Charge / Automatic Defrost Selection / System: Digital Display, Graphic Thermometer, Automatic Defrost Selection / S |   |  |  |  |  |
| Evaporator Type / Defrost Method Refrigerant Charge / Flammability R290, 135 gms, GWP:3 ODP:0 / Flammable  Controller/Electrical System Configuration and Features  Eye Level Power Switch Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Compressor Safe Guard Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder  Eye Level Keyed Off-On - Alarm Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Current protection Current protection Single RTD (1000 ohm shielded Platinum RTD) Standard Fully Adjustable Standard Standard Dimensions and Construction   |   |  |  |  |  |
| Refrigerant Charge / Flammability  Regon, 135 gms, GWP:3 ODP:0 / Flammable  Eye Level  Reye Off-On - Alarm  Yes / Yes  Controller/Electrical System Configuration and Features  Eye Level  Reye Configuration and Features  Eye Level  Reyed Off-On - Alarm  Yes / Yes  Controller/Electrolon System Configuration and Features  Standard  Standard  Power Failure Alarm  Standard  Electronic Chart Recorder  Dimensions and Construction   |   |  |  |  |  |
| Controller Level Power Switch Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Compressor Safe Guard Control Sensor Control Sensor Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder  Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Cept of Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Yes / Yes Current protection Single RTD (1000 ohm shielded Platinum RTD) Standard Fully Adjustable Standard Standard Dimensions and Construction  | Forced Air Evaporator Coil / Automatic Defrost            |  |  |  |  |
| Controller Level Power Switch Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Compressor Safe Guard Control Sensor Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder  Eye Level Keyed Off-On - Alarm Carphic Thermometer, Automatic Defrost S Single RTD (1000 ohm shielded Platinum RTD) Standard Fully Adjustable Standard Standard Dimensions and Construction  |   |  |  |  |  |
| Power Switch Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Compressor Safe Guard Control Sensor Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder  Standard Dimensions and Construction  |   |  |  |  |  |
| Controller Type IntrLogic Control System: Digital Display, Graphic Thermometer, Automatic Defrost S Setpoint Security / Programmable Yes / Yes  Compressor Safe Guard Current protection  Control Sensor Single RTD (1000 ohm shielded Platinum RTD)  Connectivity / Remote Outputs Standard  Adjustable Warm / Cold Alarms Fully Adjustable  Power Failure Alarm Standard  Electronic Chart Recorder Standard  Dimensions and Construction  |   |  |  |  |  |
| Setpoint Security / Programmable Compressor Safe Guard Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Standard Adjustable Warm / Cold Alarms Power Failure Alarm Electronic Chart Recorder Set of Yes Current protection Single RTD (1000 ohm shielded Platinum RTD) Standard Fully Adjustable Standard Standard Dimensions and Construction   |   |  |  |  |  |
| Compressor Safe Guard Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Standard Adjustable Warm / Cold Alarms Power Failure Alarm Standard Electronic Chart Recorder Standard Dimensions and Construction  | ystem   |  |  |  |  |
| Control Sensor Single RTD (1000 ohm shielded Platinum RTD) Connectivity / Remote Outputs Standard Adjustable Warm / Cold Alarms Fully Adjustable Power Failure Alarm Standard Electronic Chart Recorder Standard Dimensions and Construction   | Yes / Yes   |  |  |  |  |
| Connectivity / Remote Outputs  Adjustable Warm / Cold Alarms  Power Failure Alarm  Electronic Chart Recorder  Standard  Dimensions and Construction  |   |  |  |  |  |
| Adjustable Warm / Cold Alarms  Power Failure Alarm  Standard  Electronic Chart Recorder  Standard  Dimensions and Construction   | Single RTD (1000 ohm shielded Platinum RTD)               |  |  |  |  |
| Power Failure Alarm Standard Electronic Chart Recorder Standard Dimensions and Construction  |   |  |  |  |  |
| Electronic Chart Recorder Standard  Dimensions and Construction  |   |  |  |  |  |
| Dimensions and Construction  |   |  |  |  |  |
|  |   |  |  |  |  |
|  |   |  |  |  |  |
| Interior Dimensions (D x W x H) 72.4 cm x 133.4 cm x 147.3 cm (28.5" x 52.5" x 58.0")  |   |  |  |  |  |
| Exterior Dimensions (D x W x H) 96.2 cm x 143.5 cm x 199.4 cm (37.9" x 56.5" x 78.5")  |   |  |  |  |  |
|  | 5.08 cm (2.0") High-Density Water-Blown Polyurethane Foam |  |  |  |  |
| Door Perimeter heater Yes  | Yes   |  |  |  |  |
| Shelves / Load Limit (14) Drawers Adjustable In 1" Increments / 27 kg (60 lbs) per Drawer  |   |  |  |  |  |
|  | Standard with Locks                                       |  |  |  |  |
|  | 371 kg / 817 lb   |  |  |  |  |
| Typical Performance Characteristics in 20°C Ambient  |   |  |  |  |  |
| 50 cuft Upright Freezer, Pull Down and Warm Up  50 cuft Upright Freezer at -30C Cycle  —Pull Down  Warm Up  MAX  MIN  AVG  Test Unit Series Number or MSO Number: 19   | 585-B-10  |  |  |  |  |
| 15 Average Cabinet Temp at -30C Cycle (C):   | Inloaded<br>-30.1<br>6.9 / -1.6<br>2<br>4.3<br>30         |  |  |  |  |

1) Performance is nominal and individual units may vary.

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- 2) Product performance will differ due to product amount, product size and operating conditions.
- Continuous product enhancements may, without notice, result in amendments or ommisions to this specification. Thermo Scientific
  cannot accept responsibility for damage, injury, loss or expenses resulting from misapplication of the information herein.

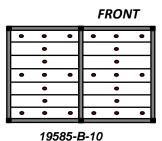
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Typical Cabinet Temperature Map Freezer 50cuft , 14 Drawers, 2 Outer Doors Temperatures are averages during > 20 cycles after reaching a setpoint of -30C

## **Top View of Shelves**

| op view                   | O1                        |       |  |  |
|---------------------------|---------------------------|-------|--|--|
| M3 M4<br>M5               | M53 M54<br>M55            | REAR  |  |  |
| M1 M2                     | M51 M52                   | FRONT |  |  |
| M10                       | M60                       |       |  |  |
| M15                       | M65                       |       |  |  |
| M18 M19                   | M68 M69                   |       |  |  |
| M20<br>M16 M17            | M70<br>M66 M67            |       |  |  |
| M25                       | M75                       |       |  |  |
| M30                       | M80                       | 1     |  |  |
| M33 M34<br>M35<br>M31 M32 | M83 M84<br>M85<br>M81 M82 |       |  |  |



Cabinet Average: -30.1 C
Probe Average: -29.2 C
Peak Variation: +6.9 C / -1.6 C

|     | M1    | M2    | M3    | M4    | M5    | M10   | M15   |
|-----|-------|-------|-------|-------|-------|-------|-------|
| Avg | -29.2 | -29.6 | -29   | -29.8 | -29.4 | -29.9 | -29.8 |
| Max | -24.6 | -23.9 | -23.7 | -23.2 | -24.1 | -27   | -27   |
| Min | -29.8 | -30.4 | -29.7 | -30.7 | -30.2 | -30.4 | -30.3 |
|     | M16   | M17   | M18   | M19   | M20   | M25   | M30   |
| Avg | -29.8 | -29.9 | -30   | -30   | -30   | -30.1 | -30.3 |
| Max | -26.5 | -27.4 | -25.7 | -26.5 | -26.5 | -27.4 | -26.1 |
| Min | -30.3 | -30.2 | -30.6 | -30.6 | -30.5 | -30.6 | -30.9 |
|     | M31   | M32   | M33   | M34   | M35   |       |       |
| Avg | -30   | -30.7 | -30.1 | -30.9 | -30.3 |       |       |
| Max | -27.5 | -27.2 | -27.1 | -26.6 | -26.8 |       |       |
| Min | -30.6 | -31.3 | -30.6 | -31.6 | -30.9 |       |       |
|     | M51   | M52   | M53   | M54   | M55   | M60   | M65   |
| Avg | -29.6 | -29.6 | -30.2 | -29.8 | -29.6 | -30.2 | -30.3 |
| Max | -24.9 | -24.9 | -24.7 | -24.6 | -24.6 | -27   | -27.5 |
| Min | -30.7 | -30.5 | -31.2 | -30.7 | -30.5 | -30.8 | -30.8 |
|     | M66   | M67   | M68   | M69   | M70   | M75   | M80   |
| Avg | -30.3 | -30.2 | -30.7 | -30.6 | -30.4 | -30.5 | -30.4 |
| Max | -27.8 | -27.4 | -27.6 | -26.1 | -28.1 | -27.8 | -27.8 |
| Min | -30.7 | -30.7 | -31.3 | -31.1 | -30.9 | -30.9 | -31   |
|     | M81   | M82   | M83   | M84   | M85   |       |       |
| Avg | -29.6 | -30   | -30.5 | -30   | -30.2 |       |       |
| Max | -27.1 | -27.5 | -27.2 | -27.1 | -27.7 |       |       |
| Min | -30.3 | -30.5 | -31.1 | -30.5 | -30.7 |       |       |

