



Facility Requirements

設備需求

	A220	A440	A700	A1000
Space Required - Steps Up: L x W x H - in (mm)	34.0 x 36.0 x 78.0 (864 x 914 x 1956)	45.0 x 47.0 x 79.0 (1143 x 1194 x 2007)Q	55.0 x 62.5 x 80.0 (1397 x 1588 x 2032)	65.0 x 72.2 x 81.0 (1651 x 1834 x 2057)
Space Required - Steps Down: L x W x H - in (mm)	34.0 x 44.5 x 78.0 (864 x 1130 x 1956)	45.0 x 55.0 x 79.0 (1143 x 1397 x 2007)	55.0 x 74.0 x 80.0 (1397 x 1880 x 2032)	65.0 x 83.7 x 81.0 (1651 x 2126 x 2057)
Max Floor Load lbs/ft ² (kg/m ²)	378 (1846)	352 (1719)	322 (1572)	305 (1490)

	E264	E528	E840	E1200
Space Required - Steps Up: L x W x H - in (mm)	34.0 x 40.0 x 82.0 (864 x 1016 x 2083)	45.0 x 52.0 x 83.0 (1143 x 1321 x 2108)	55.0 x 62.5 x 84.0 (1397 x 1588 x 2134)	65.0 x 72.2 x 85.0 (1651 x 1834 x 2159)
Space Required - Steps Down: L x W x H - in (mm)	34.0 x 50.0 x 82.0 (864 x 1270 x 2083)	45.0 x 62.5 x 83.0 (1143 x 1588 x 2108)	55.0 x 74.0 x 84.0 (1397 x 1880 x 2134)	65.0 x 83.7 x 85.0 (1651 x 2126 x 2159)
Max Floor Load lbs/ft ² (kg/m ²)	454 (2217)	422 (2060)	386 (1885)	366 (1787)

Electrical	100-230VAC 50-60Hz 0.7A continuous, 2.9A full load
LN2 Supply	22-35 PSI (1.5-2.4 Bar) CGA-295
Ventilation	Laboratory air change rate minimums are typically sufficient for LN2 freezer installations; however, consult your Health and Human Safety Officer or equivalent.
Oxygen Monitoring	Oxygen monitoring and alarms are recommended for any LN2 setup.
Temperature	Near room temperature, 18°-27°C (65°-80°F)
Relative Humidity	Less than 50%, non condensing
Seismic Restraint	Seismic restraints may be required in earthquake prone areas. Please follow local standards and regulations. Contact Azenta for more information.

Regulatory

Azenta Cryo Freezers meet the following safety requirements conforming to:
UL STD 61010-1, CSA STD C22.2 # 61010-1, Low Voltage Directive (2014/35/EU)



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Cryogenic Storage

Cryogenic Temperature (-190°C)
Freezers and Sample Storage Systems

High Efficiency Cryo Freezers

液態氮自動填充儲存桶



INCREASE CAPACITY | IMPROVE ERGONOMICS | STAY CONNECTED





Simple Controls, Secure Storage

Touchscreen controller with LAN, text and email alerts automatically maintains the freezer conditions. Critical data is recorded and can be pushed to the cloud, emailed or saved to a USB flash drive. Supports independent temperature and level monitoring for redundant peace of mind.

Increase Capacity & Improve Ergonomics

Cryogenic LED and automatic fog clear enhance visibility and sample access. Optimized designs minimize liftover height and balance capacity and usability with sufficient workspace to maintain the cold chain.





Sample Access

LED | Fog Clear | Workspace
Access Control | Chain of Custody

Touchscreen

Text | Email | Cloud | USB



Ergonomics

Folding Step
Low Lifter Height
Functional Handle

Safety

Enclosed Cold
Surfaces and
Controls
Plug & Play Setup

Optimized Design

Size | Capacity | Usability
Independent Temp & Level Monitoring





Azenta A220 & Extended Height E264

Simple, Secure -190°C LN2 Vapor Storage

Designed For *Samples* By Users

ERGONOMICS

- Cryo LED & Auto Fog Clear
- Full Sample Visibility
- Low Liftover Height | Workspace

CONNECTED

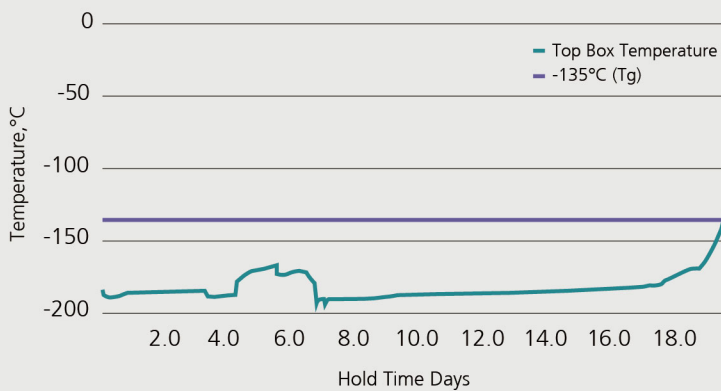
- Touchscreen with LAN
- Text & Email Alerts | Cloud Backup
- Redundant Remote Monitoring

CAPACITY

- 10-30% More Samples
- Highest Storage Density
- Lowest LN2 Usage Per Sample



A220 Temperature Test



STORAGE TEMPERATURE: -190°C
LID OPEN TEMPERATURE: < -165°C
HOLD TIME < TG: > 10 DAYS

Temperature test performed with 2 ml vial inventory and default vapor storage settings



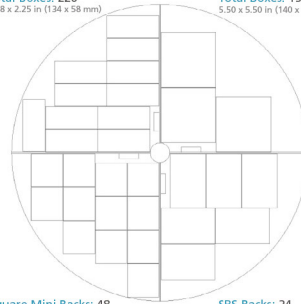
Azena A220 & Extended Height E264

	A220	E264
2 ml Vial Capacity (Vials Boxes Racks)		
Slim Vertical Racks	22,000 220 44	26,400 264 44
Boxes / Racks	5	6
Square Racks	15,600 156 12	18,000 180 12
Boxes / Racks	13	15
Cassette Capacity (Cassettes Frames Cassettes/Frames)		
25 ml Cassettes	1,708 244 7	1,952 244 8
50 ml Cassettes	952 136 7	1,088 136 8
250 ml Cassettes	400 100 4	500 100 5
500 ml Cassettes	336 84 4	420 84 5
Dimensions		
Outer Diameter - in (mm)	34.0 (864)	34.0 (864)
Overall Height - in (mm)	58.0 (1473)	62.0 (1575)
Usable Height - in (mm)	30.0 (762)	34.0 (864)
Step Height - in (mm)	9.5 (241)	9.5 (241) x 2
Liftover Height - in (mm)	39.5 (1003)	34.0 (864)
Neck Opening - in (mm)	12.6 (320)	12.6 (320)
Empty Weight - lbs (kg)	650 (295)	710 (322)
Working Weight* - lbs (kg)	1,060 (481)	1,180 (535)
Capacity & Performance		
LN2 Capacity (Vapor Storage)	65 L	
Hold Time < Tg	> 10 Days	
Safety Regulatory		
	UL / CSA STD 61010-1 LVD (2014/35/EU)	

* 2 ml vial inventory and default vapor storage settings

Vial Inventory:

2 ml Slim: 44
Boxes per Rack: 5
Total Boxes: 220
5.28 x 2.25 in (134 x 58 mm)

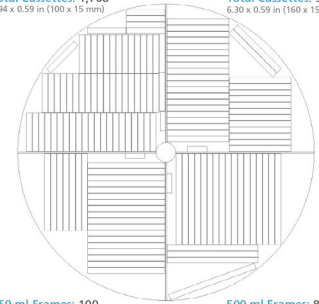


Square Mini Racks: 48
Boxes per Rack: 13
Total Boxes: 624
3.18 x 3.34 in (81 x 85 mm)

Square Racks: 12
Boxes per Rack: 13
Total Boxes: 156
5.50 x 5.50 in (140 x 140 mm)

Cassette Inventory:

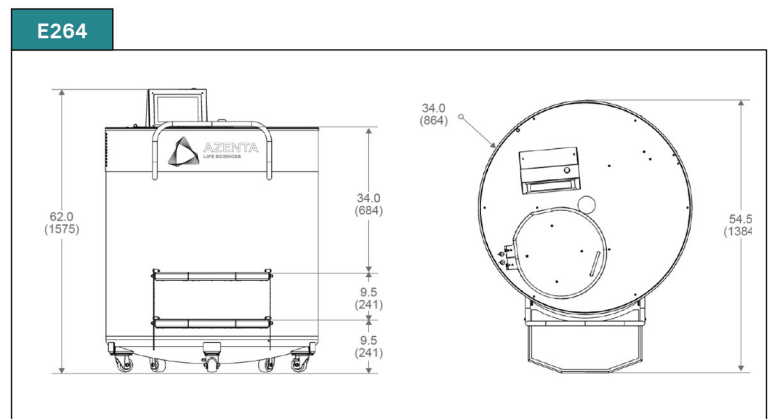
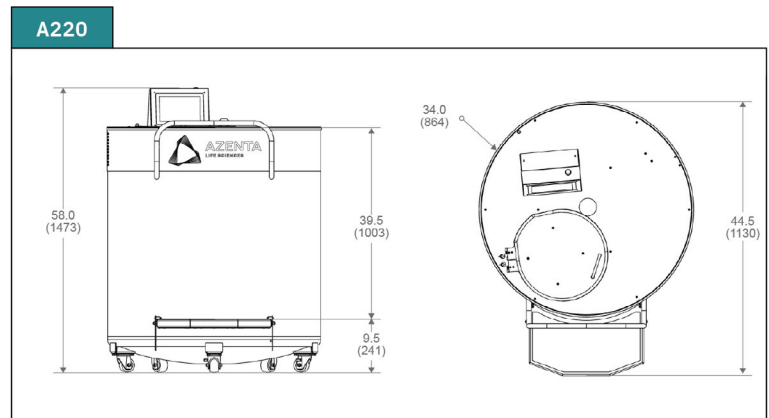
25 ml Frames: 244
Cassettes per Frame: 7
Total Cassettes: 1,708
3.94 x 0.59 in (100 x 15 mm)



250 ml Frames: 100
Cassettes per Frame: 4
Total Cassettes: 400
7.88 x 0.59 in (200 x 15 mm)

50 ml Frames: 136
Cassettes per Frame: 7
Total Cassettes: 952
6.30 x 0.59 in (160 x 15 mm)

500 ml Frames: 84
Cassettes per Frame: 4
Total Cassettes: 336
9.30 x 0.59 in (236 x 15 mm)





Azenta A440 & Extended Height E528

Simple, Secure -190°C LN2 Vapor Storage

Designed For *Samples* By Users

ERGONOMICS

- Cryo LED & Auto Fog Clear
- Full Sample Visibility
- Low Lifterover Height
- Workspace

CONNECTED

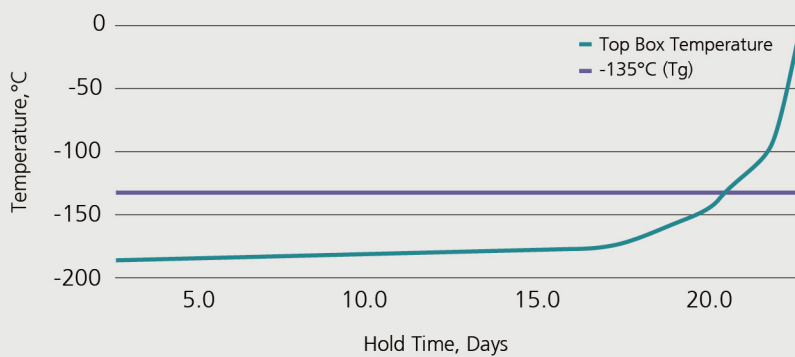
- Touchscreen with LAN
- Text & Email Alerts
- Cloud Backup
- Redundant Remote Monitoring

CAPACITY

- 10-30% More Samples
- Highest Storage Density
- Lowest LN2 Usage Per Sample



A440 Temperature Test



STORAGE TEMPERATURE: -190°C
HOLD TIME (Tg): > 15 Days

Temperature test performed with 2 ml vial inventory and default vapor storage settings



Azena A440 & Extended Height E528

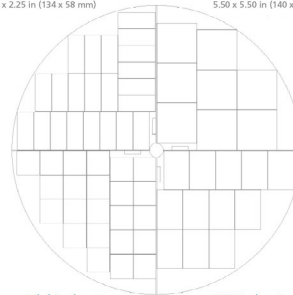
	A440	E528
2 ml Vial Capacity (Vials Boxes Racks)		
Slim Vertical Racks	44,000 440 88	52,800 528 88
Boxes / Racks	5	6
Square Racks	41,600 416 32	48,000 480 32
Boxes / Racks	13	15
Cassette Capacity (Bags Frames Bags/Frames)		
25 ml Cassettes	3,241 463 7	3,704 463 8
50 ml Cassettes	1,932 276 7	2,208 276 8
250 ml Cassettes	848 212 4	1,060 212 5
500 ml Cassettes	688 172 4	860 172 5
Outer Diameter - in (mm)	45.0 (1143)	45.0 (1143)
Overall Height - in (mm)	59.0 (1499)	63.0 (1600)
Usable Height - in (mm)	30.0 (762)	34.0 (864)
Step Height - in (mm)	10.5 (267)	10.0 (254) x 2
Liftover Height - in (mm)	39.5 (1003)	34.0 (864)
Neck Opening - in (mm)	18.2 (462)	18.2 (462)
Empty Weight - lbs (kg)	900 (408)	975 (442)
Working Weight* - lbs (kg)	1,760 (798)	1,960 (889)
LN2 Capacity (Vapor Storage)	150 L	
Hold Time < Tg	> 15 Days	
Safety Regulatory	UL / CSA STD 61010-1 LVD (2014/35/EU)	

* 2 ml vial inventory and default vapor storage settings

Vial Inventory:

2 ml Slim Racks: 88
Boxes per Rack: 5
Total Boxes: 440
5.28 x 2.25 in (134 x 58 mm)

Square Racks: 32
Boxes per Rack: 13
Total Boxes: 416
5.50 x 5.50 in (140 x 140 mm)



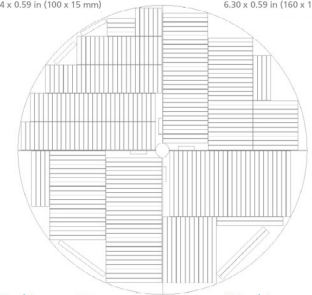
Square Mini Racks: 92
Boxes per Rack: 13
Total Boxes: 1,196
3.18 x 3.34 in (81 x 85 mm)

SBS Racks: 48
5.50 x 3.63 in (140 x 92 mm)

Cassette Inventory:

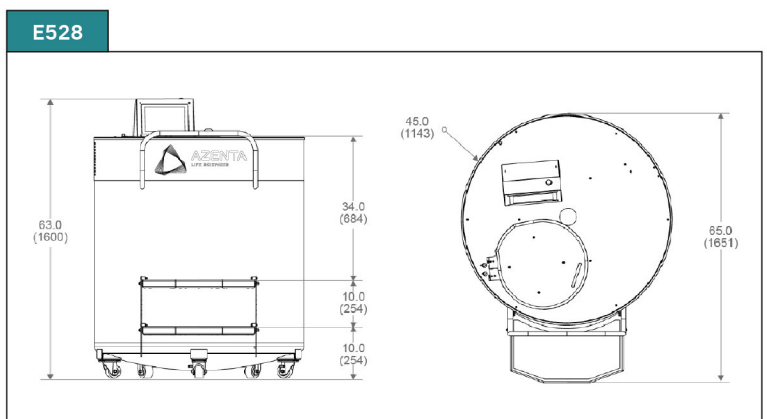
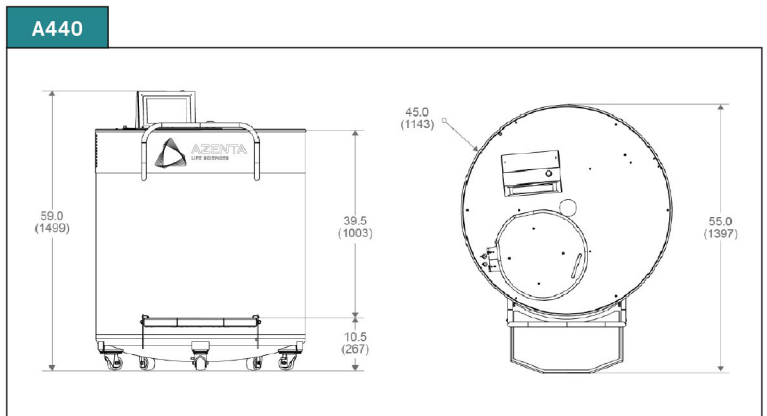
25 ml Frames: 463
Cassettes per Frame: 7
Total Cassettes: 3,241
3.94 x 0.59 in (100 x 15 mm)

50 ml Frames: 276
Cassettes per Frame: 7
Total Cassettes: 1,932
6.30 x 0.59 in (160 x 15 mm)



250 ml Frames: 212
Cassettes per Frame: 4
Total Cassettes: 848
7.88 x 0.59 in (200 x 15 mm)

500 ml Frames: 172
Cassettes per Frame: 4
Total Cassettes: 688
9.30 x 0.59 in (236 x 15 mm)





Azenta A700 & Extended Height E840

Simple, Secure -190°C LN2 Vapor Storage

Designed For *Samples By Users*

ERGONOMICS

- Cryo LED & Auto Fog Clear
- Full Sample Visibility
- Low Lifter Height | Workspace



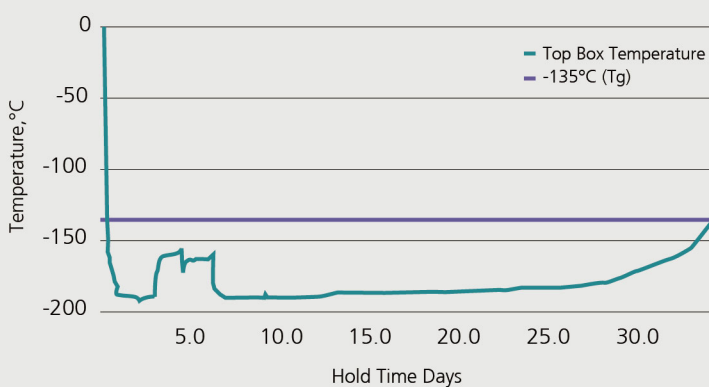
CONNECTED

- Touchscreen with LAN
- Text & Email Alerts | Cloud Backup
- Redundant Remote Monitoring

CAPACITY

- 10-30% More Samples
- Highest Storage Density
- Lowest LN2 Usage Per Sample

A700 Temperature Test



Storage Temperature: -190°C
Lid Open Temperature: < -160°C
Hold Time < Tg: > 25 Days

Temperature test performed with 2 ml vial inventory and default vapor storage settings



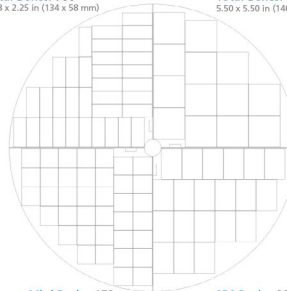
Azena A700 & Extended Height E840

	A700	E840
2 ml Vial Capacity (Vials Boxes Racks)		
Slim Vertical Racks	70,000 700 140	84,000 840 140
Boxes / Racks	5	6
Square Racks	67,600 676 52	78,000 780 52
Boxes / Racks	13	15
Cassette Capacity (Bags Frames Bags/Frames)		
25 ml Cassettes	5,124 732 7	5,856 732 8
50 ml Cassettes	3,080 440 7	3,520 440 8
250 ml Cassettes	1,376 344 4	1,720 344 5
500 ml Cassettes	1,120 280 4	1,400 280 5
Outer Diameter - in (mm)	55.0 (1397)	55.0 (1397)
Overall Height - in (mm)	63.0 (1600)	67.0 (1702)
Usable Height - in (mm)	30.0 (762)	34.0 (864)
Step Height - in (mm)	10.0 (254) x 2	10.5 (267) x 2
Liftover Height - in (mm)	34.0 (864)	37.0 (940)
Neck Opening - in (mm)	23.2 (589)	23.2 (589)
Empty Weight - lbs (kg)	1,560 (708)	1,650 (748)
Working Weight* - lbs (kg)	2,000 (907)	2,225 (1009)
LN2 Capacity (Vapor Storage)	250 L	
Hold Time < Tg	> 25 Days	
Safety Regulatory	UL / CSA STD 61010-1 LVD (2014/35/EU)	

* 2 ml vial inventory and default vapor storage settings

Vial Inventory:

2 ml Slim: 140
Boxes per Rack: 5
Total Boxes: 700
5.28 x 2.25 in (134 x 58 mm)



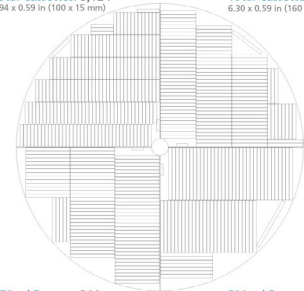
Square Racks: 52
Boxes per Rack: 13
Total Boxes: 676
5.50 x 5.50 in (140 x 140 mm)

Square Mini Racks: 152
Boxes per Rack: 13
Total Boxes: 1,976
3.18 x 3.34 in (81 x 85 mm)

SBS Racks: 80
5.50 x 3.63 in (140 x 92 mm)

Cassette Inventory:

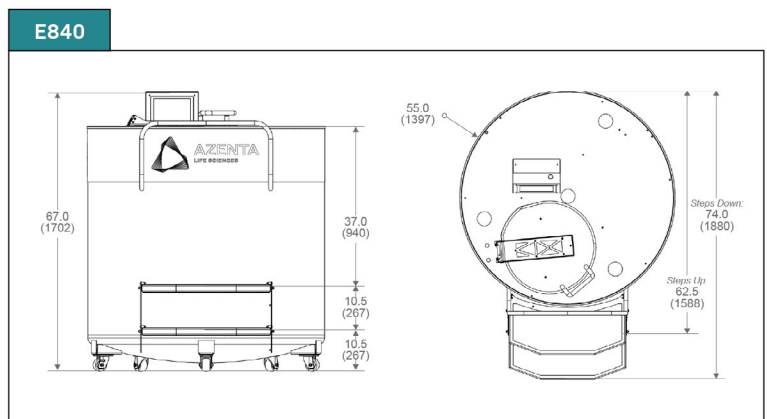
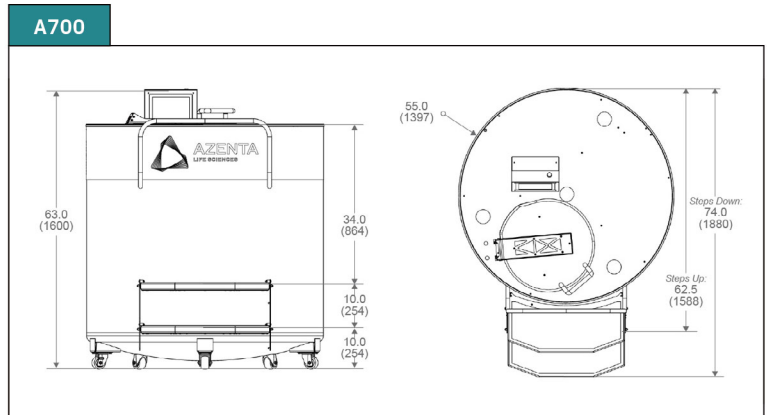
25 ml Frames: 732
Cassettes per Frame: 7
Total Cassettes: 5,124
3.94 x 0.59 in (100 x 15 mm)



50 ml Frames: 440
Cassettes per Frame: 7
Total Cassettes: 3,080
6.30 x 0.59 in (160 x 15 mm)

250 ml Frames: 344
Cassettes per Frame: 4
Total Cassettes: 1,376
7.88 x 0.59 in (200 x 15 mm)

500 ml Frames: 280
Cassettes per Frame: 4
Total Cassettes: 1,120
9.30 x 0.59 in (236 x 15 mm)





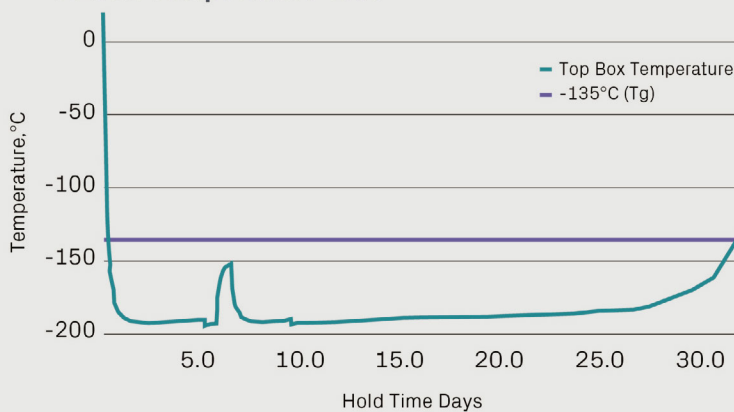
Azena A1000 & Extended Height E1200

Simple, Secure -190°C LN2 Vapor Storage

Designed For *Samples* By Users



A1000 Temperature Test



Storage Temperature: -190°C
Lid Open Temperature: < -150°C
Hold Time < Tg: > 21 Days

Temperature test performed with 2 ml vial inventory and default vapor storage settings



Azenta A1000 & Extended Height E1200

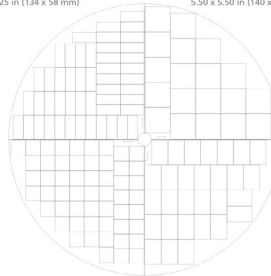
	A1000	E1200
2 ml Vial Capacity (Vials Boxes Racks)		
Slim Vertical Racks	106,000 1,060 212	127,200 1,272 212
Boxes / Racks	5	6
Square Racks	98,800 988 76	114,000 1,140 76
Boxes / Racks	13	15
Cassette Capacity (Bags Frames Bags/Frames)		
25 ml Cassettes	7,448 1,064 7	8,512 1,064 8
50 ml Cassettes	4,508 644 7	5,152 644 8
250 ml Cassettes	2,032 508 4	2,540 508 5
500 ml Cassettes	1,680 420 4	2,100 420 5
Dimensions & Weight		
Outer Diameter - in (mm)	65.0 (1651)	65.0 (1651)
Overall Height - in (mm)	59.0 (1499)	64.0 (1626)
Usable Height - in (mm)	30.0 (762)	34.0 (864)
Step Height - in (mm)	10.5 (267) x 2	11.0 (279) x 2
Liftover Height - in (mm)	34.0 (864)	37.0 (940)
Neck Opening - in (mm)	28.2 (716)	28.2 (716)
Empty Weight - lbs (kg)	1,900 (862)	2,010 (912)
Working Weight* - lbs (kg)	2,600 (1179)	2,900 (1315)
Capacity & Performance		
LN2 Capacity (Vapor Storage)	390 L	
Hold Time < Tg	> 21 Days	
Safety & Regulatory		
Safety Regulatory	UL / CSA STD 61010-1 LVD (2014/35/EU)	

* 2 ml vial inventory and default vapor storage settings

Vial Inventory:

2 ml Slim Rack: 212
Boxes per Rack: 5
Total Boxes: 1,060
5.28 x 2.25 in (134 x 58 mm)

Square Racks: 76
Boxes per Rack: 13
Total Boxes: 988
5.50 x 5.50 in (140 x 140 mm)



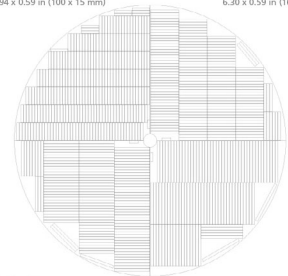
Square Mini Racks: 216
Boxes per Rack: 13
Total Boxes: 2,808
3.18 x 3.34 in (81 x 85 mm)

SBS Racks: 116
5.50 x 3.63 in (140 x 92 mm)

Cassette Inventory:

25 ml Frames: 1,064
Cassettes per Frame: 7
Total Cassettes: 7,448
3.94 x 0.59 in (100 x 15 mm)

50 ml Frames: 644
Cassettes per Frame: 7
Total Cassettes: 4,508
6.30 x 0.59 in (160 x 15 mm)



250 ml Frames: 508
Cassettes per Frame: 4
Total Cassettes: 2,032
7.88 x 0.59 in (200 x 15 mm)

500 ml Frames: 420
Cassettes per Frame: 4
Total Cassettes: 1,680
9.30 x 0.59 in (236 x 15 mm)

