STATEBOURNE cryogenics

Biosystem Access and Arctic Series

NEW Arctic Vapour phase Version

Liquid or Vapour Phase storage

Storage From 10,000 to 50,700 Cryovials

Automatic LN2 top up

Microprocessor control

Full lid opening

Full access to all racks

Easier to locate racks

Less fogging

Smaller size

Lockable lid

Dual fill Solenoids

Arctic Vapour phase

Super cold vapour

No sample-LN2 contact "dry"

All samples are on extra tall plinths

Cryogenic innovation & technology you can trust....

Biosystem Access Series

Automatic LN2 Refrigerators.

The Biosystem 12, 24 and 50 models are designed to provide frequent-access users with rapid specimen storage and retrieval.
Full control and security backup is provided by a class-leading microprocessor controlled-system.
State of the art construction allied with the very latest in super-insulation techniques ensure that the Biosystem Access Series offer a unique combination of security and economy along with excellent isothermal properties.

Every Biosystem Access series container can be configured for either liquid (-196°C),or Vapour phase storage. In vapour-phase operation, our design-flexibility is such that units can be configured to store at temperatures from - 150°C to as low as -190°C.

Every Biosystem Access Series unit is backed by our comprehensive 5 year vacuum Warranty and further compliance with the EC Medical Devices Directive 93/42/EC

Biosystem 12, 24 and 50 are compact and provide the best economic solution for floor space use within a laboratory.

Access Series Features

- Castor mounted for easy location and movement within laboratory
- Full width top opening for quick access placing and retrieving samples
- Key operated lockable lid for complete access security
- Smooth surface high efficiency insulating neck plug for easy cleaning
- Painted stainless steel top plate for strength and no corrosion
- Coloured anodised storage racks available for easy identification
- Full operation and insulation instructions provided
- Installation, training, commissioning and on site maintenance are available worldwide
- De-Fog and quick chill functions for good visibility on lid opening and accelerated-re-cooling after lid is shut.
  (timings configurable through Microprocessor settings)
- Control Systems can cope with LN2 pressure range from 20 to 40 psi.

optional coloured storage racks available

Access Series Options

- Pipelines.
  Hot Gas by-pass feature provides additional economy when filling by longer pipe lines as well as elimination of frost formation.
- Daisy-chain systems makes use of the cold pipeline and can save 20-50% LN2 consumption.

Product Features

- Full width opening for easy, quick access to all samples.
- Vapour phase storage.
- Liquid phase storage.
- Quick chill feature for fast temperature recovery.
- Hot gas by-pass available on all models.
- Encapsulated plug for easy cleaning.
- All metal lid and top plate for greater durability.
- Protocol Testing.
  All units can be offered with IQP and OQP.
- 5 YEAR VACUUM WARRANTY

CE
93/42/EC

Biosystem Arctic Series

Biosystem Access 12 Arctic Series

For extra cold vapour phase storage of 10,250 vials at -190 C with solid plinth

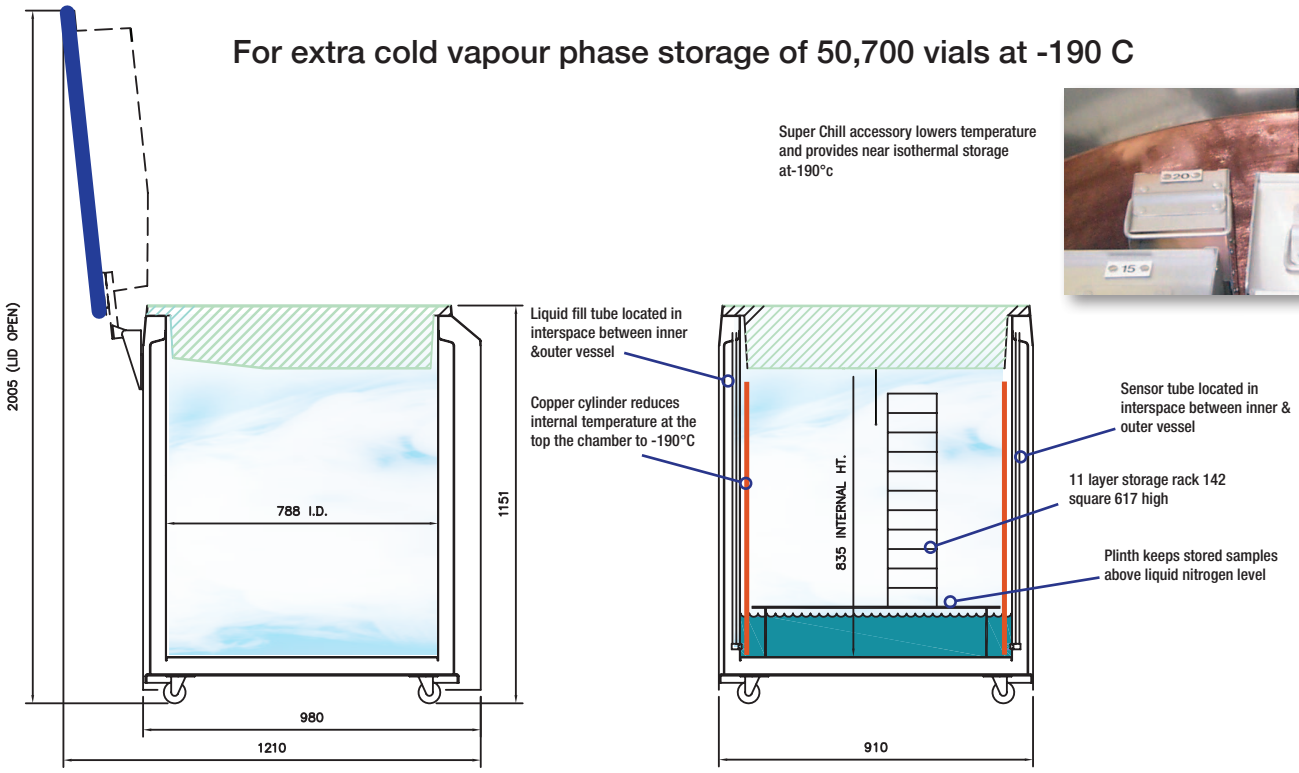
Biosystem Access 24 Arctic Series

For extra cold vapour phase storage of 20,350 vials at -190 C

Biosystem Access 50 Arctic Series

For extra cold vapour phase storage of 50,700 vials at -190 C

Super Chill accessory lowers temperature and provides near isothermal storage at-190°c



New Arctic Version - very cold and very dry

- Super chill copper liner fitted as standard for vapour phase storage at -190C
- Copper lining generates uniformity in temperature gradient
- Solid plinth of 140mm so racks sit above the LN2
- No dripping racks when samples are removed
- Solid plinth for more stable racks
- Shorter racks for easier lifting
- Stainless steel racks can be used and will be below -150C (option)
- Easy to check LN2 levels with a dipstick
- Easy to pour in LN2 in the event of an emergency
- Vapour guard feature provides guaranteed non contact between samples and liquid nitrogen. (Biosystem 24 and 50 only)
- Able to cope with pressures of up to 3 bar, and works on pipelines

Access Series Microprocessor Controller features

- Fully alarmed for any abnormal refrigerator condition
- Data-logging of temperature vs time and all events
- Data retention ensured by back-up battery (automatically charged)
- PC connection port for desktop control and downloading data.
- Self-diagnostic electronic circuitry
- Full automatic refrigerator operational control
- Connection port for remote alarms
- Connection port for autodialler
- User configurable parameters for time and temperature functions

All units feature smooth wipe-clean neck plugs.

The tested logic of Statebourne's Microprocessor controller has been incorporated in to the proven Biosystem Access series refrigerators with sample security as the most important priority.
Statebourne Engineers continously monitor performance of all components and every unit is rigorously tested in service conditions in our factory before shipment.

BIOSYSTEM Access 12 - The smallest fully automatic liquid nitrogen refrigerator in this series, with a capacity for the storage of 10250 2ml ampoules in the vapour phase or 12300 in the liquid phase. This model provides storage of samples for the smallest laboratory with maximum security.

BIOSYSTEM Access 24 - The mid range model providing storage for 20350 2ml ampoules in the vapour phase or 24050 in the liquid phase, this model provides more economic floor space utilisation with rapid accessibilty and maximum security.

BIOSYSTEM Access 50 - Bulk storage capacity of 50700 2ml ampoules in vapour or 58500 in liquid phase this unit provides the largest volume storage with fast accessibility and all the usual Biosystem control and maximum security features.

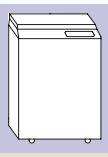
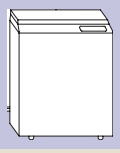
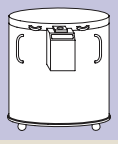
Technical Data

MODEL	Biosystem Access 12 and Arctic	Biosystem Access 24 and Arctic	Biosystem Access 50 and Arctic
PART NUMBER Biosytem Access PART NUMBER Biosytem Arctic	9916025 9916095	9916060 9916097	9916051 9916099
LN2 Capacity (litres) Vapour/Liquid	32/178	54/334	150/762
Internal usable height mm	745	835	910
Internal usable diameter mm	617	788	1130
Weight Empty (Kg)	202	268	370
Weight Full (nitrogen) excluding ICS (kg)	346	538	986
Overall height (lid closed) mm	1077	1164	1320
Lid opening height mm	1750	2005	2685
Overall width mm	741	910	1250
Overall depth mm	900	1083	1645

See pages 6 and 7 for all sample storage capacities and system part number details.

Biosystem Access Series

Biosystem Access liquid phase and vapour phase Storage Capacities

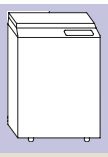
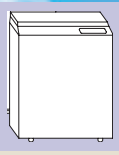
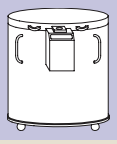
MODEL		Biosystem Access 12	Biosystem Access 24	Biosystem Access 50
1.2 & 2ml Cryovials	L	12,300 Part No. 5801259	24,050 Part No. 5801252	50,700 Part No. 5801655
	V	10,250 Part No. 5801260	20,350 Part No. 5801253	50,700 Part No. 5801655
5ml Cryovials	L	5,103 Part No. 5801382	9,639 Part No. 5801384	25,272 Part No. 5801387
	V	4,374 Part No. 5801383	8,262 Part No. 5801385	22,113 Part No. 5801388
1.4ml 96 Well Plates	L	N/A	N/A	N/A
	V	13,824 Part No. 5801374	25,920 Part No. 5801375	65,472 Part No. 5801377
Baxter Bags (Type R995)	L	192 Part No. 5801278	408 Part No. 5801342	816 Part No. 5801343
	V	192 Part No. 5801278	408 Part No. 5801342	816 Part No. 5801343
Gambro Bags (Type DF700)	L	126 Part No. 5801281	224 Part No. 5801357	504 Part No. 5801358
	V	126 Part No. 5801281	224 Part No. 5801357	504 Part No. 5801358
Pall 25mm Cord Blood Bags	L	1,200 Part No. 5801360	2,040 Part No. 5801361	4,440 Part No. 5801363
	V	1,000 Part No. 5801360	1,700 Part No. 5801361	4,440 Part No. 5801363
Straws 0.25cc in Goblets	L	170,560 Part No. 5801280	401,800 Part No. 5801334	979,080 Part No. 5801373
	V	170,560 Part No. 5801279	401,800 Part No. 5801335	815,900 Part No. 5801372
Straws 0.5cc in Goblets	L	75,920 Part No. 5801280	178,850 Part No. 5801334	435,810 Part No. 5801373
	V	75,920 Part No. 5801279	178,850 Part No. 5801335	363,175 Part No. 5801372

L =Liquid phase

V =Vapour phase

Biosystem Access Series

Biosystem Arctic super chill vapour phase Storage Capacities

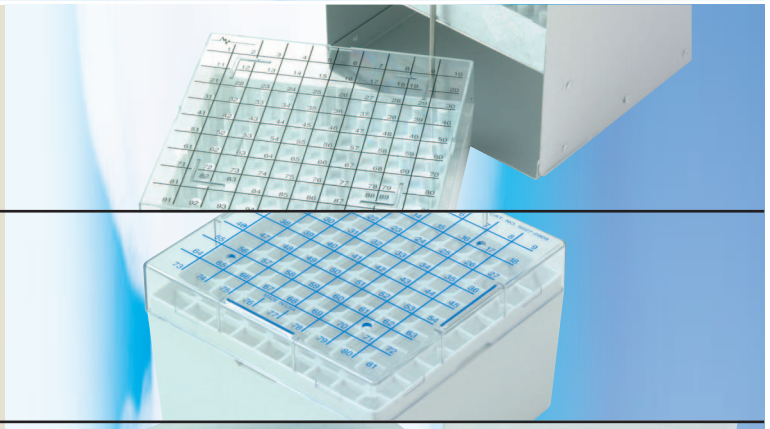




MODEL		Biosystem Access 12	Biosystem Access 24	Biosystem Access 50
1.2 & 2ml Cryovials	P	10,250 Part No. 5801672	20,350 Part No. 5801619	50,700 Part No. 580655
5ml Cryovials	P	4,374 Part No. 5801765	8,262 Part No. 5801767	22,113 Part No. 580770
1.4ml 96 Well Plates	P	13,824 Part No. 5801753	25,920 Part No. 5801755	65,472 Part No. 5801757
Baxter Bags (Type R995)	P	192 Part No. 5801278	408 Part No. 5801342	816 Part No. 5801343
Gambro Bags (Type DF700)	P	126 Part No. 5801281	224 Part No. 5801357	504 Part No. 5801358
Pall 25mm Cord Blood Bags	P	1,000 Part No. 5801759	1,700 Part No. 5801761	4,440 Part No. 5801763
Straws 0.25cc in Goblets	P	170,560 Part No. 5801771	401,800 Part No. 5801772	815,900 Part No. 5801773
Straws 0.5cc in Goblets	P	75,920 Part No. 5801771	178,850 Part No. 5801772	363,175 Part No. 5801773

P =100mm- to-150mm PLINTH

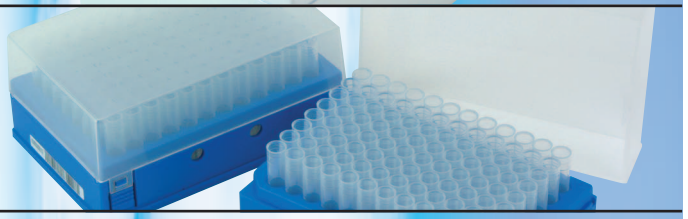
Storage System Description

1.5-2ml Cryovials.
100 Cell (10x10) and some 25 Cell (5x5)
Polycarbonate cryoboxes in aluminium racks with lifting handles and locking rods.
(Boxes Included)



5ml Cryovials.
81 Cell (9x9)
Polycarbonate cryoboxes in aluminium racks with lifting handle and locking rods.
(Boxes Included)

Storage plates.
To suit 96 Cell (12x8) Well plates of various volumes, stored in aluminium racks with double handles and locking rods.
(Boxes Not included) ask for more details.



Cryocyte/Blood bag storage.
Stacking aluminium special baskets with lifting handles designed to suit 250ml Baxter Blood Bag storage.
(basket will also store 50ml and 5ml Baxter bags, capacity will vary)
Stacking aluminium special baskets with lifting handle designed to suit Gambro Blood Bags.

Cord Blood storage.
Aluminium trays in towers with single lifting handles and lockingrods.
(Each tray will hold a maximum of 10 cassettes, cassettes not supplied).

Straw storage.
69mm diameter canisters made from Polycarbonate, storing 67mm diameter goblets. Goblet lifters provided.
(Goblets not supplied)

In the intrest of our continued product improvement, Statebourne reserve the right to amend the specification of our products.

Statebourne Cryogenics
18 Parsons Road,
Parsons Industrial Estate,
Washington,
Tyne and Wear
NE37 1EZ
England.

Web: www.statebourne.com

Tel: +44 (0) 191 416 4104
Fax: +44 (0) 191 415 0369
Email: info@statebourne.com

CE 97/23/EC CE 93/42/EC 2010/35/EU