

BIOMEDICAL FREEZERS





ARCTIKO
true cooling specialists

ARCTIKO A/S



ARCTIKO AIMS to be the first and best choice of partner in delivering advanced and customized cooling and freezing solutions primarily to the health care & life science segments globally.



FURTHERMORE, Arctiko is a flexible player and able to deliver high quality environment friendly leading edge customized solutions.

CONTENTS

INTRODUCTION

The Company	2
Arctiko G214 controller	4
Single compressor technology	5

PRODUCTS AND ACCESSORIES

Ultra low temperature upright freezers	-86°C	6-13
Ultra low temperature chest freezers	-86°C	14-17
Low temperature chest freezers	-60°C	18-19
Accessories		20-21
Racks and boxes		22-25

ABOUT ARCTIKO

Arctiko Engineering	26
Service and support	27
Technical product specifications	28-29
Certificates	30
References	31

G214 CONTROLLER

USER FRIENDLY CONTROLLER WITH ALL NECESSARY ALARMS



When engineering new technologies here at Arctiko, we have the customer in mind. The large temperature display and most user-friendly controls on the market show that once again Arctiko has managed to turn simplicity into an art. Arctiko has the smartest controller available with every possible alarm feature, integrated data logger, contact for remote alarm and USB read out. Naturally, all these features are standard on our units produced with the Arctiko controller.

Today the Arctiko controller is not only the premium of controllers worldwide, but has an upload function. This means that when Arctiko makes a software update or adds additional features, you can update your unit on site. We call this a commitment to our partners and end users, and it means that your unit will always be up to date.

FEATURES

- Micro processor controller with digital display
- Approx. 72 hours battery back up for alarms, loggings and temperature display in case of power cut
- Prepared for GSM alarm
- Prepared for connection of 2 additional probes
- Auto cycle in case of probe failure
- Ambient temperature display
- Direct download of logged data on USB memory stick
- Direct upload of new software via USB memory stick
- 3-level password protected
- Battery level indication
- Display text available in different languages
- Temperature graph

ALARM FEATURES

- Visual and acoustic alarm
- Adjustable high/low temperature alarm
- Power failure alarm
- Probe failure alarm
- Instrument failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

DATA LOGGING FEATURES

- Integrated data logger
- RS485/RS232 Interface
- Integrated memory for 30 years

EXCELLENT COOLING PERFORMANCE

WITH SINGLE COMPRESSOR COOLING SYSTEM

Storing samples at ultra-low temperatures is always a highly sensitive process, because the stored items are most likely high value drugs or irreplaceable samples of DNA, blood, cells, etc.

Patented worldwide, the Arctiko single compressor system offers the best solution in the ultra-low temperature market. With focus on simplicity, we strive to design products that are easy to use and equipped with all necessary features.

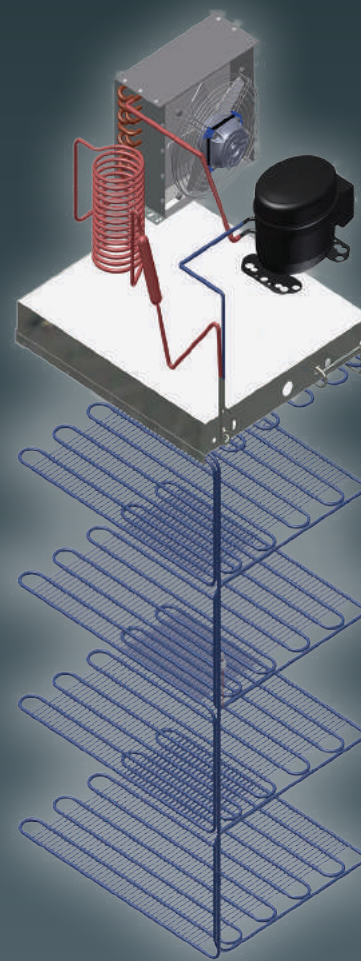
With our single compressor cooling system which only uses one compressor and one cooling cycle, Arctiko has been able to manufacture a unique range of -86° C ultra-low temperature freezers. Our true and original single-stage technology system has a unique and simple structure that ensures easy maintenance, less heat dissipation, low energy consumption and noise reduction.

The traditional cascade cooling system that requires two compressors working together has a more complex structure with many parts and a higher failure rate, which will affect the cost of ownership during the lifetime of an ultra-low temperature freezer. Our single compressor system has a more simplified structure of the cooling system and electrical circuit, which reduces the failure rate. A traditional cascade cooling system is built with two cooling cycles working together to achieve -86°C, a high and a low stage cooling cycle. In the event of failure in one of the cycles, both cycles will be out of function, and the more parts, the more risk for failures.

Arctiko's single compressor system is designed as a filterless construction, which prevents problems due to dust build-up on the filter. Dust on the filter will block the air flow through the condenser, which reduces the ability of the ULT to effectively dissipate heat. The air that bypasses the clogged air filter will carry dirt into the condenser, which will increase the energy used in the compressor and generate additional heat for the ambient environment. The single compressor compartment is located in the top of our upright freezers, which provides many great advantages, such as easy access for service and maintenance, as well as an ergonomically correct design allowing easy access to each compartment inside the ULT. The first in the world to introduce the single compressor system for ultra-low temperature freezers instead of the cascade system, Arctiko is delighted to see more and more manufacturers starting to implement the single compressor system, which shows that Arctiko has been the true innovative manufacturer worldwide from day one.

ADVANTAGES OF THE ARCTIKO SINGLE COMPRESSOR SYSTEM:

- ➔ Low energy consumption
- ➔ Direct cooling in each chamber for greater temperature accuracy
- ➔ Low temperature difference from top to bottom – excellent temperature stability
- ➔ Easy maintenance – simple cooling system
- ➔ Low noise level
- ➔ Less heat generation
- ➔ Ergonomically correct design for easy access to all shelves



ARCTIKO SINGLE COMPRESSOR SYSTEM

WE CARE ABOUT YOUR SAMPLES AND THE ENVIRONMENT

Therefore, we have created the most innovative and sophisticated solutions for your samples with our range of ultra-low temperature freezers. The family range has been expanded to a total of 12 different models and sizes from a capacity of only 7 litres up to 826 litres to cover your exact need for storage capacity. We can supply exactly what you need in capacity, not more not less, because we also care about the environment. Although we already offer units with the lowest energy consumption worldwide, we can now also give you a wide choice in size to avoid you having an ultra-low temperature freezer of which you only use 20-30% capacity with the rest a waste of energy and an increase in your environmental footprint.

Famous worldwide, the Arctiko single compressor system gives you additional savings in energy and space. Here at Arctiko we are pleased to see more manufacturers use single compressor systems in their -86°C ULT manufacturing.

This only shows that Arctiko was right all along about using the single compressor versus cascade system for all the obvious benefits such as energy savings, simple and easy service and lower noise level.

All our -86°C ULT freezers have inner doors to protect against heat entering each compartment. This feature also makes it easier for users to share a freezer with colleagues without interfering with each other's compartments.

All these points have impact on the cost of ownership, which is why with our extended ULUF range, Arctiko is without doubt the leading innovative manufacturer of -86° ULT freezers worldwide.

We care about your samples and their security, which is why all the products in our ULUF and ULTF range have our advanced high-end controller. The controller provides all the features needed for a professional ULT freezer, such as data logger with 30+ years of memory, different interfaces, different password levels, many alarm features, and 72-hour battery backup.

With Arctiko, you get more than required in terms of security, logging, and alarm features. Simply because we care about your valuable samples.



ADVANTAGES OF THE ULUF SERIES

- ➔ Highly reliable, top performance freezer
- ➔ Direct cooling for higher temperature uniformity ($\pm 2^{\circ}\text{C}$)
- ➔ Excellent temperature stability ($\pm 2^{\circ}\text{C}$)
- ➔ Fast pull down time signifies an efficient refrigeration system
- ➔ Fast recovery time ensures integrity of stored samples
- ➔ Long hold-over time in case of power cut
- ➔ Filterless construction - makes cleaning unnecessary
- ➔ Energy-efficiency – low energy consumption resulting in lower operating cost in the long run
- ➔ Environment-friendly – use of agents and technologies that aren't harmful to the environment (100% HCFC / CFC free)
- ➔ Quality components – for a robust and long-lasting freezer
- ➔ Low noise operation – for a safe and pleasant working environment inside the lab
- ➔ Low heat dissipation – you save on your air conditioning due to lower heat dissipation
- ➔ Insulated inner doors – to prevent cold air leakage
- ➔ Heated door frame / heated vacuum valve - for easy door opening
- ➔ Magnetic door gasket - for tight closure to prevent cold loss
- ➔ Easy to service – easily accessible and replaceable components for convenient field servicing & maintenance

**at setpoint -86°C*



SINGLE
COMPRESSOR
SYSTEM



DIRECT
COOLING



FILTERLESS
CONSTRUCTION

ULTRA LOW TEMPERATURE UPRIGHT FREEZERS

-86°C

ULUF 15

ARCTIKO IS PROUD TO PRESENT OUR ULUF UNDERCOUNTER/BENCHTOP SERIES.
THIS RANGE WILL ADD A NEW DIMENSION TO YOUR LABORATORY.
THE MODELS CAN BE USED AS EITHER A BENCH-TOP OR UNDERCOUNTER MODEL.
THE COMPACT SPACE-SAVING DESIGN AND LOW NOISE LEVEL MAKE IT A
PERFECT STORAGE SOLUTION FOR YOUR LABORATORY.

CONTROLLER FEATURES

- Micro processor controller with digital display
- Approx. 72 hours battery back up for alarms, loggings and temperature display in case of power cut
- Prepared for GSM alarm
- Prepared for connection of 2 additional probes
- Auto cycle in case of probe failure
- Ambient temperature display
- Direct download of logged data on USB memory stick
- Direct upload of new software via USB memory stick
- 3-level password protected
- Battery level indication
- Display text available in different languages
- Temperature graph

ALARM FEATURES

- Visual and acoustic alarm
- Adjustable high/low temp. alarm
- Power failure alarm
- Probe failure alarm
- Instrument failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

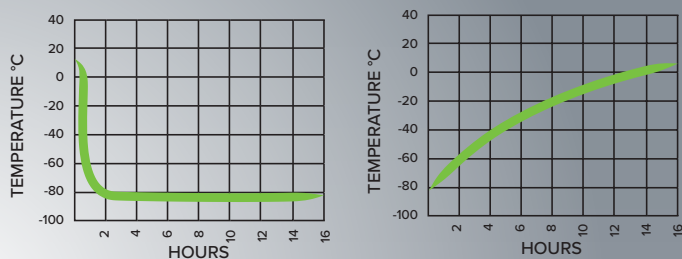
DATA LOGGING FEATURES

- Integrated data logger
- RS485/RS232 interface
- Integrated memory for 20 years



PERFORMANCE

PULL DOWN / HOLD OVER TIME



MODEL	ULUF 15
Item code (white exterior)	US-DAI 1390
Dimensions exterior WxDxH (inches)	15,76 x 24,82 x 26,20
Capacity (cu. FT)	0,3
Capacity (Liter)	7
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.

ULUF 65

ARCTIKO IS PROUD TO PRESENT OUR ULUF UNDERCOUNTER/BENCHTOP SERIES.
THIS RANGE WILL ADD A NEW DIMENSION TO YOUR LABORATORY.
THE MODELS CAN BE USED AS EITHER A BENCH-TOP OR UNDERCOUNTER MODEL.
THE COMPACT SPACE-SAVING DESIGN AND LOW NOISE LEVEL MAKE IT A
PERFECT STORAGE SOLUTION FOR YOUR LABORATORY.

CONTROLLER FEATURES

- Micro processor controller with digital display
- Approx. 72 hours battery back up for alarms, loggings and temperature display in case of power cut
- Prepared for GSM alarm
- Prepared for connection of 2 additional probes
- Auto cycle in case of probe failure
- Ambient temperature display
- Direct download of logged data on USB memory stick
- Direct upload of new software via USB memory stick
- 3-level password protected
- Battery level indication
- Display text available in different languages
- Temperature graph

ALARM FEATURES

- Visual and acoustic alarm
- Adjustable high/low temp. alarm
- Power failure alarm
- Probe failure alarm
- Instrument failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

DATA LOGGING FEATURES

- Integrated data logger
- RS485/RS232 interface
- Integrated memory for 20 years

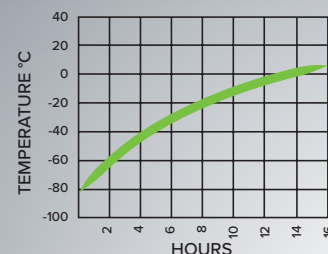
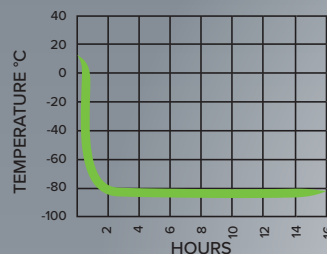


PERFORMANCE

PULL DOWN / HOLD OVER TIME

MODEL	ULUF 65
Item code (white exterior)	US-DAI 1418
Dimensions exterior W×D×H (Inches)	23,64 x 27,97 x 31,91
Capacity (cu. FT.)	1,9
Capacity (Liter)	54
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



ULTRA LOW TEMPERATURE UPRIGHT FREEZERS

-86°C

ULUF 125

ARCTICO IS PROUD TO PRESENT OUR ULUF UNDERCOUNTER/BENCHTOP SERIES.
THIS RANGE WILL ADD A NEW DIMENSION TO YOUR LABORATORY. THE MODELS CAN BE USED AS EITHER A BENCH-TOP OR UNDERCOUNTER MODEL. THE COMPACT SPACE-SAVING DESIGN AND LOW NOISE LEVEL MAKE IT A PERFECT STORAGE SOLUTION FOR YOUR LABORATORY.

CONTROLLER FEATURES

- Micro processor controller with digital display
- Approx. 72 hours battery back up for alarms, loggings and temperature display in case of power cut
- Prepared for GSM alarm
- Prepared for connection of 2 additional probes
- Auto cycle in case of probe failure
- Ambient temperature display
- Direct download of logged data on USB memory stick
- Direct upload of new software via USB memory stick
- 3-level password protected
- Battery level indication
- Display text available in different languages
- Temperature graph

ALARM FEATURES

- Visual and acoustic alarm
- Adjustable high/low temp. alarm
- Power failure alarm
- Probe failure alarm
- Instrument failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

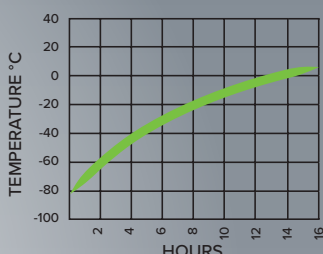
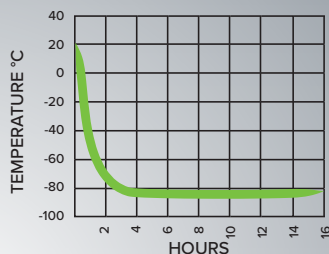
DATA LOGGING FEATURES

- Integrated data logger
- RS485/RS232 interface
- Integrated memory for 20 years



PERFORMANCE

PULL DOWN / HOLD OVER TIME



MODEL	ULUF 125
Item code (white exterior)	US-DAI 1417
Dimensions exterior W×D×H (Inches)	37,43 x 28,56 x 31,91
Capacity (cu. FT)	3,3
Capacity (Liter)	94
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



ULTRA LOW TEMPERATURE UPRIGHT FREEZERS

-86 °C

ULUF 450

THE ULUF -86°C SERIES IS PRODUCED WITH THE TRUE AND ORIGINAL SINGLE COMPRESSOR TECHNOLOGY AND OFFERS THE GREATEST TEMPERATURE STABILITY WORLDWIDE!



CONTROLLER FEATURES

- Micro processor controller with digital display
- Approx. 72 hours battery back up for alarms, loggings and temperature display in case of power cut
- Prepared for GSM alarm
- Prepared for connection of 2 additional probes
- Auto cycle in case of probe failure
- Ambient temperature display
- Direct download of logged data on USB memory stick
- Direct upload of new software via USB memory stick
- 3-level password protected
- Battery level indication
- Display text available in different languages
- Temperature graph

ALARM FEATURES

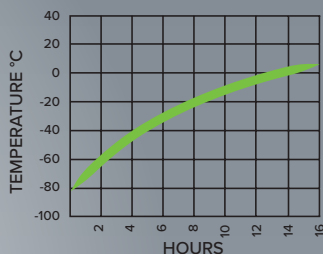
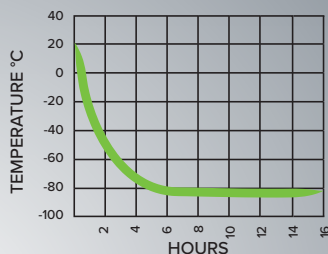
- Visual and acoustic alarm
- Adjustable high/low temp. alarm
- Power failure alarm
- Probe failure alarm
- Instrument failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

DATA LOGGING FEATURES

- Integrated data logger
- RS485/RS232 interface
- Integrated memory for 20 years

PERFORMANCE

PULL DOWN / HOLD OVER TIME



MODEL	ULUF 450
Item code (white exterior)	US-DAI 1414
Dimensions exterior W×D×H (inches)	28,37 x 35,25 x 78,40
Capacity (cu. FT)	13,9
Capacity (Liter)	393
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.

ULUF 550

THE ULUF -86°C SERIES IS PRODUCED WITH THE TRUE AND ORIGINAL SINGLE COMPRESSOR TECHNOLOGY AND OFFERS THE GREATEST TEMPERATURE STABILITY WORLDWIDE



CONTROLLER FEATURES

- Micro processor controller with digital display
- Approx. 72 hours battery back up for alarms, loggings and temperature display in case of power cut
- Prepared for GSM alarm
- Prepared for connection of 2 additional probes
- Auto cycle in case of probe failure
- Ambient temperature display
- Direct download of logged data on USB memory stick
- Direct upload of new software via USB memory stick
- 3-level password protected
- Battery level indication
- Display text available in different languages
- Temperature graph

ALARM FEATURES

- Visual and acoustic alarm
- Adjustable high/low temp. alarm
- Power failure alarm
- Probe failure alarm
- Instrument failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

DATA LOGGING FEATURES

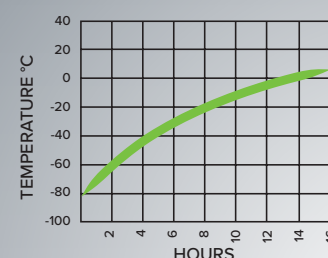
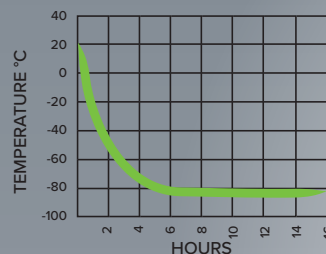
- Integrated data logger
- RS485/RS232 interface
- Integrated memory for 20 years

PERFORMANCE

PULL DOWN / HOLD OVER TIME

MODEL	ULUF 550
Item code (white exterior)	US-DAI 1377
Dimensions exterior W*D*H (Inches)	36,25 x 35,25 x 78,40
Capacity (cu. FT)	19,6
Capacity (Liter)	556
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



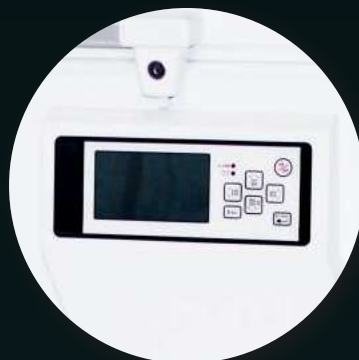
INNOVATION FROM ARCTIKO

Our SUF/SF range of low temperature chest freezers provides reliable low temperature freezing and high temperature uniformity to ensure temperature stability and low power consumption.

Even when opened multiple times throughout the day, the SUF/SF horizontal freezers will store your samples under optimal conditions. Cold air falls and stays inside the chamber and hot air rises and stays outside the chamber. Consequently, if you need to open the freezers often, the SUF/SF range is the best solution for your cold storage.

Digital display, alarms, contact for remote monitoring and baskets are some of the standard features of the SUF/SF range. They help provide the security needed for safe sample storage at these temperatures.

The capacity of the SUF/SF range extends from 71 to 368 litres.





SINGLE
COMPRESSOR
SYSTEM



DIRECT
COOLING



FILTERLESS
CONSTRUCTION



ULTRA LOW TEMPERATURE CHEST FREEZERS

-86°C

SUF 100

INNOVATIVE THINKING IS OFTEN SPOILED BY COMPROMISE, THE SUF SERIES SHOWS THAT HIGH PERFORMANCE FREEZING WITH THE FOCUS ON ENERGY SAVING IS THE FUTURE. OUR INTEGRATED COOLING SYSTEM GIVES MAXIMUM USE ON LIMITED SPACE, AND WE PRIDE OURSELVES WITH THE LOWEST NOISE LEVEL AVAILABLE.

ADVANTAGES OF THE SUF SERIES

- Single compressor
- Low energy consumption
- Low noise level (50 dBa)
- 100% HCFC/CFC free
- Sub lids
- Castors and door key lock
- Porthole for external temperature probes

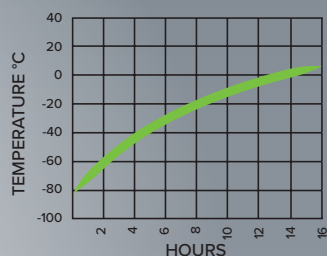
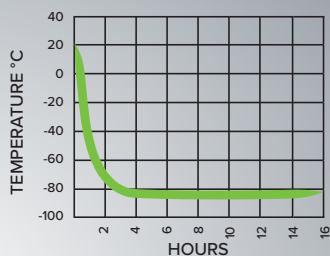
CONTROLLER FEATURES

- Digital display
- Visual and acoustic alarm
- Adjustable high/low temperature alarm
- Contact for remote alarm
- Probe failure alarm



PERFORMANCE

PULL DOWN / HOLD OVER TIME



MODEL	SUF 100
Item code (white exterior)	US-SUF 100
Dimensions exterior W×D×H (inches)	21,8 x 26,1 x 33,5
Capacity (cu. FT)	2,5
Capacity (Liter)	71
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.

SUF 500

INNOVATIVE THINKING IS OFTEN SPOILED BY COMPROMISE, THE SUF SERIES SHOWS THAT HIGH PERFORMANCE FREEZING WITH THE FOCUS ON ENERGY SAVING IS THE FUTURE. OUR INTEGRATED COOLING SYSTEM GIVES MAXIMUM USE ON LIMITED SPACE, AND WE PRIDE OUR SELVES WITH THE LOWEST NOISE LEVEL AVAILABLE.

ADVANTAGES OF THE SUF SERIES

- Single compressor
- Low energy consumption
- Low noise level (50 dBa)
- 100% HCFC/CFC free
- Sub lids
- Castors and door key lock
- Porthole for external temperature probes
- Filterless construction.

CONTROLLER FEATURES

- Digital display
- Visual and acoustic alarm
- Adjustable high/low temperature alarm
- Contact for remote alarm
- Probe failure alarm

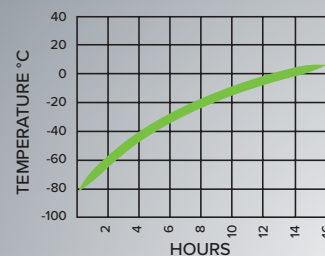
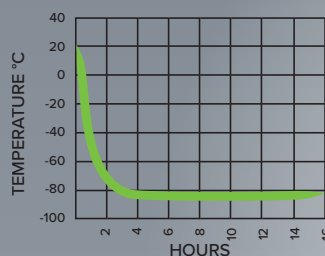


PERFORMANCE

PULL DOWN / HOLD OVER TIME

MODEL	SUF 500
Item code (white exterior)	US-SUF 500
Dimensions exterior W*D*H (Inches)	61,5 x 28,1 x 34,9
Capacity (cu. FT)	13
Capacity (Liter)	368
Temperature range (°F)	-123 / -40
Temperature range (°C)	-86 / -40
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



LOW TEMPERATURE CHEST FREEZERS

-60°C

SF 150

AS A SYNONYM FOR SECURITY, THE SF SERIES GIVES RELIABLE LOW TEMPERATURE FREEZING, WITH GOOD TEMPERATURE UNIFORMITY. DIGITAL DISPLAY, ALARMS, CONTACT FOR REMOTE MONITORING, BASKET(S) AND CASTORS ARE SOME OF THE STANDARDS.



ADVANTAGES OF THE SF SERIES

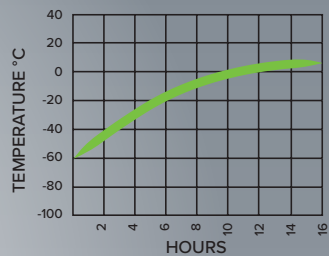
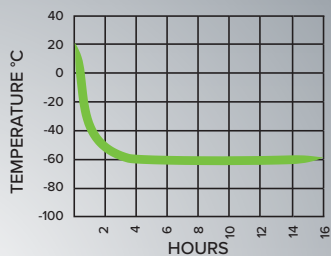
- Single compressor
- Low energy consumption
- Low noise level
- 100% HCFC/CFC free
- Castors and door key lock
- Porthole for external temperature probes.

CONTROLLER FEATURES

- Digital display
- Visual and acoustic alarm
- Adjustable high/low temperature alarm
- Contact for remote alarm
- Probe failure alarm

PERFORMANCE

PULL DOWN / HOLD OVER TIME



MODEL	SF 150
Item code (white exterior)	US-SF 150
Dimensions exterior W×D×H (inches)	28,5 x 26,1 x 850
Capacity (cu. FT)	4,7
Capacity (Liter)	133
Temperature range (°F)	-76 / -22
Temperature range (°C)	-60 / -30
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.

SF 500

AS A SYNONYM FOR SECURITY, THE SF SERIES GIVES RELIABLE LOW TEMPERATURE FREEZING, WITH GOOD TEMPERATURE UNIFORMITY. DIGITAL DISPLAY, ALARMS, CONTACT FOR REMOTE MONITORING, BASKET(S) AND CASTORS ARE SOME OF THE STANDARDS.

ADVANTAGES OF THE SF SERIES

- Single compressor
- Low energy consumption
- Low noise level
- 100% HCFC/CFC free
- Castors and door key lock
- Porthole for external temperature probes.

CONTROLLER FEATURES

- Digital display
- Visual and acoustic alarm
- Adjustable high/low temperature alarm
- Contact for remote alarm
- Probe failure alarm

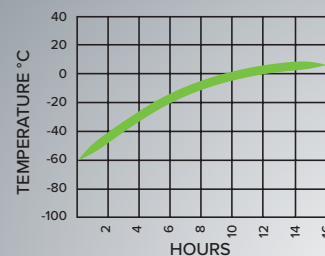
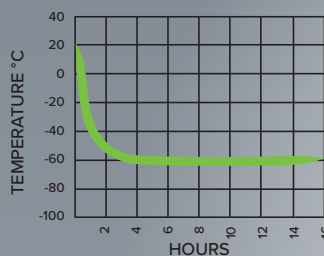


PERFORMANCE

PULL DOWN / HOLD OVER TIME

MODEL	SF 500
Item code (white exterior)	US-SF 500
Dimensions exterior W*D*H (inches)	61,5 x 28,1 x 34,9
Capacity (cu. FT)	13
Capacity (Liter)	368
Temperature range (°F)	-76 / -22
Temperature range (°C)	-60 / -30
Power supply (V)	110
Frequency (Hz)	60

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



ACCESSORIES



TEMPERATURE CHART RECORDER

A chart recorder is the optimal solution for documenting temperature conditions over a certain period of time. A replaceable pen continuously documents the temperature on a chart that circulates on either a 7-day or 24-hour basis. The chart recorder can be built in as an option in many Arctiko products.



APPROVALS:
EN 420:2003
EN 388
EN 511

DRAWER SYSTEM

The new Arctiko multi-purpose drawer system is a great way to keep your samples in order. Designed for easy access and overview, the system also makes it easy to divide up the freezer for several users. The drawer system can be used in our ULUF range.



CRYO GLOVES

Our water resistant cryo gloves protect your hands and prevent frostbite while you are handling frozen products in ultra-cold environments down to -160°C . The gloves have multi layers of insulation from finger tip to mid-forearm, and can also be used in very high temperatures up to 123°C . Available in different models and sizes.

VOLTAGE STABILIZERS

- Microprocessor controlled stabilizer
- Very wide input voltage range
- Excellent output voltage stability
- Includes surge and spike suppression
- Extremely fast response
- Incorporates over voltage and under voltage disconnect
- Incorporates TimeSave feature

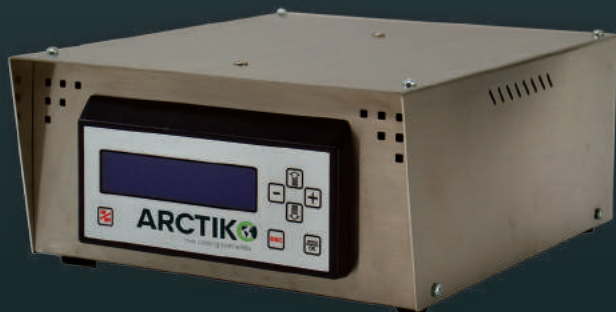
The SVS voltage stabilizers monitor the mains voltage continuously. If the voltage rises or drops, the SVS will stabilize the output to ensure the voltage reaching your equipment remains constant at 230V (+/-6%), within the operating range of the unit. If the voltage falls below 142V or rises above 295V, the SVS will disconnect the output, thereby protecting the load. Once the main voltage returns again within acceptable limits, the SVS will reconnect the output following a start up delay.

The SVS will ensure that your equipment will receive normal, stabilized power which is essential for refrigeration equipment in unsteady power areas to ensure long service operation without damage and ensure that the contents of the refrigeration is kept at the optimal temperature.



SVS08-22

MODEL	ITEM CODE	AMPS	VA@240V	FREQUENCY (HZ)	SOCKET	WEIGHT (KG)	DIM. EXTERIOR (MM)
SVS04-22 (240 V)	DAI 0941	4	960	50/60	Schuko	3	240×178×150
SVS08-22 (240 V)	DAI 0942	8	1920	50/60	Schuko	5	270×387×160



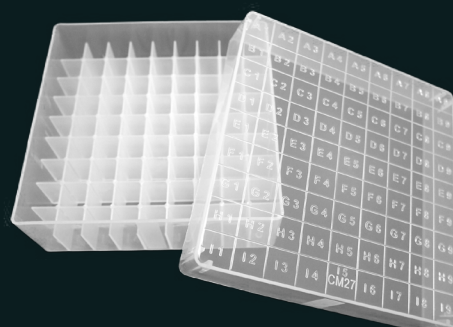
CO₂ / LN₂ BACKUP

A number of Arctiko products can be supplemented by a CO₂/LN₂ backup system for optimized safety. The backup system is supplied with a heavy-duty internal battery injection indicator and digital display with alarm functions. It injects CO₂/LN₂ in the event that the temperature inside a freezer rises above a preset temperature value.

BOXES FROM ARCTIKO

There are many different plastic boxes on the market. The manufacturer we selected has focus on quality and many years of experience in making strong, easy-to-use storage boxes with customers in mind.

Each box is equipped with a standard 9x9 divider providing storage capacity for 81 samples.



MODEL	BOX SIZE (HEIGHT MM)	DIVIDERS	TOTAL NO. OF VIALS*	MATERIAL	COLOR	DIMENSIONS W×D×H (MM)
PB50	50	9×9	81 pcs.	Polypropylene	Transparent	133×133×50
PB75	75	9×9	81 pcs.	Polypropylene	Transparent	133×133×75
PB96	96	9×9	81 pcs.	Polypropylene	Transparent	133×133×96

*Can hold vials with a max. Ø of 12,5 mm.
We reserve the right to change specifications without notice.
Subject to confirmation, availability and errors.

RACKS FROM ARCTIKO

We offer a large variety of racks for our freezers. The racks are made of high quality stainless steel and help you organize the samples in your freezer. Our range consists of racks for chest freezers and upright freezers, either with drawers or with compartments for introducing the box from the side.

In order to help you understand the meaning of the codes, here's an example:



U S R 50 - 4 4



CFR

CHEST FRONT RACK

On this model, the box is removed from the front, which ensures a good overview for the person taking the racks from the freezer. Racks are made of strong stainless steel.

Freezer model	Box size (height mm)	Rack model and total quantity	No. of boxes per rack (depth x height)	Total no. of boxes	Exterior dimensions of rack (WxDxH mm)
SUF 100	50	5 x CFR50-08	8	40	140 x 140 x 445
SF 150	50	6 x CFR50-11 + 3 x CFR50-06 (= 9 racks)	11 x 6	66 + 18 (= 84 boxes)	140 x 140 x 610 / 140 x 140 x 335
SUF 500 / SF 500	50	24 x CFR50-11 + 3 x CFR50-06 (= 27 racks)	11 x 6	18 + 264 (= 282 boxes)	140 x 140 x 610 / 140 x 140 x 335
SUF 100	75	5 x CFR75-05	5	25	140 x 140 x 406
SF 150	75	6 x CFR75-08 + 3 x CFR75-04 (= 9 racks)	8 x 4	48 + 12 (= 60 boxes)	140 x 140 x 629 / 140 x 140 x 326
SUF 500 / SF 500	75	24 x CFR75-08 + 3 x CFR75-04 (= 27 racks)	8 x 4	192 + 12 (= 204 boxes)	140 x 140 x 629 / 140 x 140 x 326
SUF 100	100	5 x CFR100-04	4	20	140 x 140 x 425
SF 150	100	6 x CFR100-05 + 3 x CFR100-03 (= 9 racks)	5 x 3	30 + 9 (= 39 boxes)	140 x 140 x 530 / 140 x 140 x 320
SUF 500 / SF 500	100	24 x CFR100-05 + 3 x CFR100-03 (= 27 racks)	5 x 3	120 + 9 (= 129 boxes)	140 x 140 x 530 / 140 x 140 x 320

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.

OTHER
RACKS CAN BE
DELIVERED UPON
REQUEST



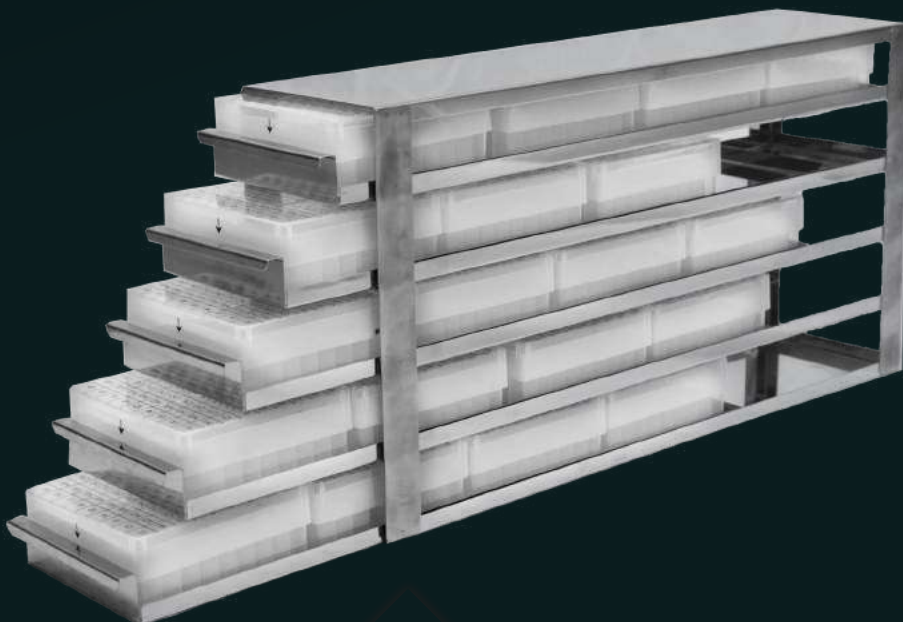
UDR

UPRIGHT DRAWER RACK

Strong stainless steel racks with drawers for easy and practical access to your boxes of samples.

Freezer model	Box size (height mm)	Rack model and total quantity	No. of boxes per rack (depth x height)	Total no. of boxes	Exterior dimensions of rack (WxDxH mm)
ULUF 65	50	2 x UDR50-35	3 x 5	30	140 x 421 x 285
ULUF 125	50	4 x UDR50-34	3 x 4	48	140 x 421 x 228
ULUF 450	50	15 x UDR50-44	4 x 4	240	140 x 558 x 228
ULUF 550	50	20 x UDR50-44	4 x 4	320	140 x 558 x 228
ULUF 65	75	2 x UDR75-33	3 x 3	18	140 x 421 x 246
ULUF 125	75	4 x UDR75-33	3 x 3	36	140 x 421 x 246
ULUF 450	75	15 x UDR75-34	3 x 4	180	140 x 421 x 328
ULUF 550	75	20 x UDR75-43	4 x 3	240	140 x 558 x 246
ULUF 65	100	2 x UDR100-32	3 x 2	12	140 x 421 x 214
ULUF 125	100	4 x UDR100-42	4 x 2	32	140 x 558 x 214
ULUF 450	100	15 x UDR100-42	4 x 2	120	140 x 558 x 214
ULUF 550	100	20 x UDR100-42	4 x 2	160	140 x 558 x 214

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



USR

UPRIGHT SIDE RACK

Our USR racks have individual compartments for each box and are very strong and solid. The box is introduced from the side.

Freezer model	Box size (height mm)	Rack model and total quantity	No. of boxes per rack (depth x height)	Total no. of boxes	Exterior dimensions of rack (WxDxH mm)
ULUF 65	50	2 x USR50-35	3 x 5	30	139 x 419 x 276
ULUF 125	50	4 x USR50-34	3 x 4	48	139 x 419 x 221
ULUF 450	50	15 x USR50-44	4 x 4	240	139 x 558 x 221
ULUF 550	50	20 x USR50-44	4 x 4	320	139 x 558 x 221
ULUF 65	75	2 x USR75-33	3 x 3	18	139 x 419 x 240
ULUF 125	75	4 x USR75-33	3 x 3	36	139 x 419 x 240
ULUF 450	75	15 x USR75-43	4 x 3	180	139 x 558 x 240
ULUF 550	75	20 x USR75-43	4 x 3	240	139 x 558 x 240
ULUF 65	100	2 x USR100-32	3 x 2	12	139 x 419 x 210
ULUF 125	100	4 x USR100-42	4 x 2	32	139 x 558 x 210
ULUF 450	100	15 x USR100-42	4 x 2	120	139 x 558 x 210
ULUF 550	100	20 x USR100-42	4 x 2	160	139 x 558 x 210

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.



ARCTIKO ENGINEERING

PROJECT ENGINEERING OF COLD STORAGE ROOMS

Our customers often have specific requirements. It is important for us to meet the requirements and provide the best possible solution at a fair and competitive price. We are very strong in the temperature range from -40° to -80° C in both storage and blast freezers. We can even provide a modular and flexible solution with three freezers in one unit -40°/-80° C and blast to -80° C.

We are able to design and build the exact solution you require and need. Our production facility is located in Denmark. Products are 90% finished when they leave our factory, ready for installation and commission on site.

Our products are quick and easy to install, which means less disturbance at your production facility, so that you can focus your time and energy on daily business. We are able to install our products all over the world in cooperation with our partners. Arctiko can be part of every step from consultancy to quotes and project management.

Arctiko has been involved with cold storage solutions for nearly two decades. We provide simple storage solutions for medicine or vaccines at +2°/+8° C, and high-end GMP validated storage/blast freezer solutions in the temperature range -40° to -80° C. We can count some of the world's largest pharmaceutical, medical and biotechnical companies among our customers.

Our main focus is reliability, temperature uniformity, redundancy, sustainability and GMP documentation for the pharmaceutical and biotechnical industries. We are familiar with the strict and often complicated requirements from the pharmaceutical industry. We support the industry with:

- ➔ In-house consulting
- ➔ Project management
- ➔ GMP validation
- ➔ Automation specialists
- ➔ Mechanical engineering
- ➔ 3D drawings
- ➔ Certifications



SERVICE AND SUPPORT

Our service team has more than 40 years of experience and knowledge in cooling technology and controls. We are able to answer any kind of enquiries you may have regarding:

- Spare parts ordering/delivering/pricing
- Product maintenance and servicing
- Technical and after sales support
- User and service manual
- Service training sessions for dealers

The most common questions can be found directly on our website www.arctikoservice.com after the distributor login. As a distributor you can use the service website to find almost any request you may have, to perform service on Arctiko units.

CONTACT DETAILS

service@arctiko.com
+1 615 916 0138
www.arctikoservice.com



ULTRA LOW TEMPERATURE UPRIGHT FREEZERS

-86°C

ARCTIKO INT
true cooling specialists



MODEL		ULUF 15	ULUF 65	ULUF 125	ULUF 450	ULUF 550
UNIT INFORMATION	Item code	US-DAI 1390	US-DAI 1418	US-DAI 1417	US-DAI 1414	US-DAI 1377
	Dimensions exterior WxDxH (mm)	400x630x665	600x710x810	950x725x810	720x895x1990	920x885x1990
	Dimensions exterior WxDxH (Inches)	15,76x24,82x26,20	23,64x27,97x31,91	37,43x28,56x31,91	28,37x35,25x78,40	36,25x35,25x78,40
	Capacity (L)	7	54	94	393	556
	Capacity (cu.FT)	0,3	1,9	3,3	13,9	19,6
	Dimensions interior WxDxH (mm)	150x143x310	360x468x320	360x493x530	480x608x1345	680x608x1345
	Dimensions interior WxDxH (Inches)	5,91x5,63x12,21	14,18x18,44x12,61	14,18x19,42x20,88	18,91x23,96x52,99	26,79x23,96x52,99
	Insulation (mm)	120	120	120	120	120
	Insulation (Inches)	4,7	4,7	4,7	4,7	4,7
	Temperature range (°C)	-86 / -40	-86 / -40	-86 / -40	-86 / -40	-86 / -40
	Temperature range (°F)	-123 / -40	-123 / -40	-123 / -40	-123 / -40	-123 / -40
	Max. ambient temperature (°C)	25	25	25	25	25
	Max. ambient temperature (°F)	77	77	77	77	77
POWER	Power supply (V)	110	110	110	110	110
	Frequency (Hz)	60	60	60	60	60
	Power consumption (KWH/24H)	7,6	8,8	8,9	14,8	16,3
	AMP (A)	2,8	3,5	3,3	11,5	11,5
	Horse power (HP)	3/8	5/8	5/8	3/4	3/4
	Battery backup for alarms and temperature display in the event of power cut (approx hours)	72 hours	72 hours	72 hours	72 hours	72 hours
ALARM FUNCTIONS	Alarm display as text - not codes	yes	yes	yes	yes	yes
	Visual / Acoustic alarm	yes	yes	yes	yes	yes
	Power failure alarm	yes	yes	yes	yes	yes
	Adjustable high/low temperature alarm	yes	yes	yes	yes	yes
	Open door alarm	yes	yes	yes	yes	yes
	Probe failure alarm	yes	yes	yes	yes	yes
	Low battery alarm	yes	yes	yes	yes	yes
	Compressor alarm	yes	yes	yes	yes	yes
LOGGER & EXT. CONNECTION	Contact for remote alarm	yes	yes	yes	yes	yes
	Prepared for GSM alarm module	yes	yes	yes	yes	yes
	Data logger	yes	yes	yes	yes	yes
	RS 232 interface	yes	yes	yes	yes	yes
	USB for software upload	yes	yes	yes	yes	yes
	USB readout for logged data	yes	yes	yes	yes	yes
	Chart recorder	optional	optional	optional	optional	optional
DISPLAY FEATURES	Digital display	yes	yes	yes	yes	yes
	Defrost manual / auto	manual	manual	manual	manual	manual
	2 extra probes can be mounted inside	yes	yes	yes	yes	yes
	Password protection for turning unit on/off	yes	yes	yes	yes	yes
	Temperature graph on display	yes	yes	yes	yes	yes
OTHER EQUIPMENT	Porthole for external probe etc.	yes	yes	yes	yes	yes
	Lighting	no	no	no	yes	yes
	Key lock / Card lock	yes / optional	yes / optional	yes / optional	yes / optional	yes / optional
	Castors / with break in front	no / no	2 small in the back	2 small in the back	yes / yes	yes / yes
	Shelves (pcs.) / drawers (pcs.)	no	no	1 / no	4 / no	4 / no
	Adjustable shelves (pcs.) / drawers (pcs.)	no	no	no	no	no
	Basket (pcs.)	no	no	no	no	no
	Sub lids / sub doors (pcs.)	no / 1	no / 1	no / 2	no / 5	no / 5
	Reversible doors (pcs.)	no	no	no	no	no
REFRIGERATION & CABINET	No. of compressors	1	1	1	1	1
	Refrigerant	EP88	EP88	EP88	EP88	EP88
	Inner liner material	stainless steel	stainless steel	stainless steel	stainless steel	stainless steel
	Cabinet material	varnished steel	varnished steel	varnished steel	varnished steel	varnished steel
	Colour (exterior)	white	white	white	white	white
	Foam agent	polyurethane	polyurethane	polyurethane	polyurethane	polyurethane
SHIPPING	Weight (KG)	40	79	100	177	205
	Weight (lb)	88	174	221	377	452
	Shipping weight (KG)	56	101	131	246	335
	Shipping weight (lb)	124	223	289	542	739
	Shipping dimensions WxDxH (cm)	77x48x89	81x79x103	103x81x103	84x114x231	103x118x231
	Shipping dimensions WxDxH (inches)	30,34x18,91x35,07	31,91x31,13x40,58	40,58x31,91x40,58	33,09x44,92x91,01	40,58x46,49x91,01
	Shipping volume (m³)	0,33	0,58	0,86	2,02	2,57

We reserve the right to change specifications without notice. Subject to confirmation, availability and errors.

Individual ULUF units may vary and power consumption depends on loading and operating conditions. Freezer set point -80°C, ambient temp. 20-23°C, unloaded, 230V 50Hz power supply.

*Depth including distance fittings on back for correct air circulation.

ARC70921-14-GB

-86°/-60°C



	MODEL	SUF100	SUF500	SF150	SF500
UNIT INFORMATION	Item code	US-SUF 100	US-SUF500	US-SUF150	US-SF 500
	Dimensions exterior WxDxH (mm)	552x663x850	1562x713x885	722x663x850	1562x713x885
	Dimensions exterior WxDxH (Inches)	21,75x26,12x33,49	61,54x28,09x34,87	28,45x26,12x850	61,54x28,09x34,87
	Capacity (L)	71	368	133	368
	Capacity (cu.FT)	2,5	13	4,7	13
	Dimensions interior WxDxH (mm)	390x390x450	1400x440x630	560x440x635	1400x440x630
	Dimensions interior WxDxH (Inches)	11,43x11,43x17,73	55,16x17,31x24,82	22,06x17,31x25,02	55,16x17,31x24,82
	Insulation (mm)	80	80	80	80
	Insulation (Inches)	3,16	3,16	3,16	3,16
	Temperature range (°C)	-86 / -40	-86 / -40	-60 / -30	-60 / -30
	Temperature range (°F)	-123 / -40	-123 / -40	-76 / -22	-76 / -22
	Max. ambient temperature (°C)	25	25	25	25
	Max. ambient temperature (°F)	77	77	77	77
POWER	Power supply (V)	110	110	110	110
	Frequency (Hz)	60	60	60	60
	Power consumption (KWH/24H)	7,7	10,8	6,6	7,7
	AMP (A)	2,0	3,0	3,6	3,6
	Horse power (HP)	1/2	3/4	1/2	3/4
	Battery backup for alarms and temperature display in the event of power cut (approx hours)	72 hours	72 hours	72 hours	72 hours
ALARM FUNCTIONS	Alarm display as text - not codes	no	no	no	no
	Visual / Acoustic alarm	yes	yes	yes	yes
	Power failure alarm	yes	yes	no	no
	Adjustable high/low temperature alarm	yes	yes	yes	yes
	Open door alarm	no	no	no	no
	Probe failure alarm	yes	yes	yes	yes
	Low battery alarm	no	no	no	no
	Compressor alarm	no	no	no	no
LOGGER & EXT. CONNECTION	Contact for remote alarm	no	no	no	no
	Prepared for GSM alarm module	yes	yes	yes	yes
	Data logger	no	no	no	no
	RS 232 interface	no	no	no	no
	USB for software upload	no	no	no	no
	USB readout for logged data	no	no	no	no
	Chart recorder	optional	optional	optional	optional
DISPLAY FEATURES	Digital display	yes	yes	yes	yes
	Defrost manual / auto	manual	manual	manual	manual
	2 extra probes can be mounted inside	no	no	no	no
	Password protection for turning unit on/off	no	no	no	no
	Temperature graph on display	no	no	no	no
OTHER EQUIPMENT	Porthole for external probe etc.	yes	yes	yes	yes
	Lighting	no	no	no	no
	Key lock / Card lock	yes / no	yes / no	yes / no	yes / no
	Castors / with break in front	no / no	yes / no	yes / no	yes / no
	Shelves (pcs.) / drawers (pcs.)	no	no	no	no
	Adjustable shelves (pcs.) / drawers (pcs.)	no	no	no	no
	Basket (pcs.)	no	no	no	no
	Sub lids / sub doors (pcs.)	1 / no	3 / no	no	no
	Reversible doors (pcs.)	no	no	no	no
REFRIGERATION & CABINET	No. of compressors	1	1	1	1
	Refrigerant	EP88	EP88	EP88	EP88
	Inner liner material	varnished steel	varnished steel	varnished steel	varnished steel
	Cabinet material	varnished steel	varnished steel	varnished steel	varnished steel
	Colour (exterior)	white	white	white	white
	Foam agent	cyclopenthane	cyclopenthane	cyclopenthane	cyclopenthane
SHIPPING	Weight (KG)	53	90	59	89
	Weight (lb)	117	198	130	196
	Shipping weight (KG)	83	141	91	141
	Shipping weight (lb)	181	286	196	286
	Shipping dimensions WxDxH (cm)	68x64x116	166x76x106	85x75x114	136x76x106
	Shipping dimensions WxDxH (inches)	26,8x25,2x45,7	65,4x29,7x41,7	31,7x29,7x44,9	53,6x29,9x41,8
	Shipping volume (m³)	0,51	0,82	1,10	1,34



FDA

Arctiko is registered and has listed the following medical device with the U.S. Food and Drug Administration for FY 2016 Pursuant to Title 21, 807 et seq. of the United States Code of Federal Regulations.

ETL

Arctiko products are approved according to following standard(s): UL 471 issued: 2010/11/24 Ed.: 10 Rev: 2014/11/17 Commercial Refrigerators and Freezers.

CSA C22.2#120 Issued: 2013/03/01 Ed: 4 Refrigeration Equipment

ISO 13485

ISO 13485 is a standard for the design and manufacture of medical equipment. It is an independent standard certification that is generally harmonized with ISO 9001. The standard has been prepared in accordance with the European Commission with a view to the essential requirements of EU directives for medical devices and CE marking.

For Arctiko, the ISO 13485 is a quality management system ensuring that our products meet the EU directive 93/42/EEC for medical devices.

ISO 9001

ISO 9001 is the most widely used International standard in the world. It streamlines and documents Arctiko's working processes and ensures that production always meets the high quality expectations of Arctiko's partners.



REFERENCES

LABORATORIES

State Serum Institute, Copenhagen, Denmark · Max Planck Institute, Heidelberg, Germany · Laboratory SZU, Prague, Czech Republic · Biotest, Pardubice, Czech Republic · FNKV, Prague, Czech Republic · Vidia, Prague, Czech Republic · Endokrinologie, Prague, Czech Republic · FN Brno, Czech Republic · National Cancer Cell Research Institute, Japan · National Institute for Environmental · Studies, Japan · National Institute of Health Sciences, Japan · National Institute of Neuroscience, Japan · Research Institute International Medical Centre of, Japan · National Institute of Infection, Japan · Ministry of Agriculture, Forestry and Fisheries, Japan

HOSPITALS

Roskilde Hospital, Denmark · Copenhagen Hospital, Denmark · Atatürk University Hospital, Turkey · Tokyo University Hospital, Japan · Hospital NsP Na Homolce, Prague, Czech Republic · Sharite Medical Hospital, University of Berlin, Germany · University Hospital Center of Annaba, Algeria · University Hospital Center of Tlemecen, Algeria

UNIVERSITIES

Aalborg University, Denmark · University of Copenhagen, Denmark · Cambridge University, United Kingdom · Ondokuzmayis University, Turkey · Ege University, Turkey · The University of Tokyo, Japan · Osaka University, Japan · Kyoto University, Japan · Hoddai University, Japan · The University of Tokushima, Japan · Kumamoto University, Japan · Nippon Medical School, Japan · Tokyo Medical University, Japan · Tokyo Medical and Dental University, Japan

INSTITUTES

Statens Serum Institut, Denmark

BIOMEDICAL SECTOR

Vejle Hospital, Denmark · Holbaek Hospital, Denmark · Naestved Hospital, Denmark · Herlev Hospital, Denmark · Glostrup Hospital, Denmark · Biomedical Sector, Nove Mesto na Morave, Czech Republic · Biomedical Sector, Jilemnice, Czech Republic · Biomedical Sector, Hradec Kralove, Czech Republic

PRIVATE SECTOR

Novo Nordisk, Denmark · Statens Serum Institut, Denmark · H. Lundbeck A/S, Denmark · Orion Pharmaceutical Company, Finland · Mono jo (Antibody production), Jordan · Abot Japan Co., Japan · Kissei Pharmaceutical Co., Japan · Dai-Ichi Pharmaceutical Co., Japan · Chugai Pharmaceutical Co., Japan · Nissui Pharmaceutical Co., Japan · Banyu Pharmaceutical Co., Japan · Mitsubishi Pharma Corporation, Japan · Yamanouchi Pharmaceutical Co., Japan · Asahi Breweries, Japan

And much more...



ARCTIKO A/S

Oddesundvej 39
6715 Esbjerg N
Denmark
+1 615 916 0138
www.arctiko.com
info@arctiko.com

ARCTIKO  **INT**
true cooling specialists



Distributed by

CHINCHILLA LIFE SCIENCES

900 Jorie Blvd.
Oak Brook, IL
United States
+1 630 645 0600
www.chinchillalife.com
info@chinchillalife.com