

## BIOMEDICAL FREEZERS & REFRIGERATORS



# CERTIFICATES

## 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 our products always meet the expectations of our partners concerning high quality.



## 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.



## ETL CERTIFICATION

Arctiko's products for the US market are approved according to the following standards:

- 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





## MEDICAL DEVICES DIRECTIVE

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Arctiko offers selected products which are approved according to the EU directive 93/42/EEC for medical devices and CE marked as Class II equipment.



## CE CERTIFICATION

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Arctiko's product ranges are CE marked stating that our products meet all legal requirements concerning essential health and machinery safety.



## FDA REGISTRATION

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Arctiko International is FDA registered pursuant to Title 21, 807 et seq. of the United States Code of Federal Regulations.





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## BIOMEDICAL STORAGE SOLUTIONS **WITH HIGH RELIABILITY**

Arctiko biomedical freezers and refrigerators store and secure your samples with outstanding cooling reliability and performance. Arctiko has combined the highest quality cooling performance created by forced air cooling with the many features and user-friendliness offered by the Arctiko controller G214. The results meet the more stringent requirements for lower power consumption, more precise cooling uniformity, the need for temperature and alarm surveillance, documentation and validation, making Arctiko's Biomedical range the number one solution for biomedical storage.

The Arctiko Biomedical range provides ideal solutions for the research industry and healthcare sector for storing vaccines, diagnostic samples, reagents and samples such as enzymes for genetic research, culture media and temperature testing of electrical components and precision devices.

In several countries, health ministries instruct pharmaceutical companies/pharmacies to document all pharmaceutical drugs that have been stored under a certain temperature. The advantage of choosing an Arctiko product is a controller with all needed features. In particular, the data logger with memory and on-screen graphs are extremely important features needed by pharmacies.

The Arctiko Biomedical range offers a wide variety of solutions from our 55 liter undercounter models up to 1381 liters of effective capacity. Each freezer/refrigerator is pre-programmed from the factory to provide controller settings and cooling parameters for optimal, user-friendly solutions.

All products in Arctiko's biomedical range have a flexible interior so that we can meet all requirements for storage solutions! You can choose from a variety of shelf and drawer options or devise your own combination.

- Lower power consumption
- Precise and stable cooling
- Temperature and alarm surveillance
- Documentation and validation



# SPARK FREE INTERIOR

## FLAMMABLE LIQUIDS WILL BE STORED SAFELY WITH AN ARCTIKO ATEX APPROVED REFRIGERATOR OR FREEZER

► When handling or storing flammable samples in a standard biomedical refrigerator or freezer, there will be a possible ignition risk. Therefore, we at Arctiko recommend storing your flammable samples in an Arctiko ATEX approved biomedical refrigerator or freezer.

The Arctiko ATEX biomedical refrigerators and freezers are approved according to EN 60079-15 category 3, zone 2, CE EX 11-/3G. This means that the inside of the unit is approved to store flammable, explosive or otherwise volatile substances.

Stored substances should always be kept in airtight containers, this to prevent the vapor or particles of the substances from escaping their container and ignition of non spark free items.



AVAILABLE IN ATEX

### ATEX APPROVAL IS AVAILABLE AS AN OPTION ON:

LF Range (Biomedical Freezers)	-10/-30°C
LFF Range (Biomedical Combi)	+1/+10°C / -10/-30°C
LFEG Range (Biomedical Combi)	+1/+10°C / -10/-30°C
LR Range (Biomedical Refrigerator)	+1/+10°C
PR Range (Biomedical Refrigerator)	+1/+10°C



# BIOMEDICAL FREEZERS

The biomedical range allows you to store and secure your samples with outstanding cooling reliability and performance. Arctiko has combined the high-quality cooling performance created by forced air cooling with the features and user-friendliness offered by the Arctiko G214 controller. The results meet the strictest requirements for lower power consumption, more precise cooling uniformity, temperature and alarm surveillance, documentation and validation, this making the range a perfect solution for biomedical storage.

-10/-30 °C

## BENEFITS

- The flexible interior allows you to mix shelves and drawers to accommodate any storage need you might have.
- Forced air cooling for high-temperature stability and quick temperature recovery after door openings.
- Door lock on all models for optimal security of your samples.
- Stainless steel interior for good hygiene and easy cleaning.
- Automatic defrost for high temperature stability and uniformity ensures the integrity of your samples.
- Available with ATEX approved spark-free interior to keep your flammable liquids stored safely.

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LF 700 / LAF 700



-10 / -30 °C



LF 100



FORCED AIR  
COOLING



AVAILABLE IN  
ATEX



AVAILABLE IN  
STAINLESS STEEL  
EXTERIOR

Unique  
-40°C unit with  
automatic  
defrost\*

LF 100	LF 300	LF 500	LF 660-2	LF 700	LF 1400	LAF 700*
DAI 0285	DAI 0225	DAI 0245	DAI 0295	DAI 0255	DAI 0275	DAI 0290
610x659x790	520x700x1997	620x860x1997	720x860x1997	720x860x1997	1440x860x1997	740x870x2017
94	346	515	288/288	618	1361	618
-10 / -30	-10 / -30	-10 / -30	-10 / -30	-10 / -30	-10 / -30	-10 / -40
5	23	23	16	23	46	23
30	30	30	30	30	30	30
G214	G214	G214	G214	G214	G214	G214

\*Not available in ATEX / Spark free



-30 °C



MODEL	LF 660-2 / LF 660-2-ST	LF 700 / LF 700-ST	LAF 700 / LAF 700-ST	LF 1400 / LF 1400-ST
Main specifications	Item code	DAI 0295 / DAI 0296	DAI 0255 / DAI 0256	DAI 0290 / DAI 0291
	Temperature range (°C)	-10 / -30	-10 / -30	-10 / -40
	Max. ambient temperature (°C)	25	25	25
	Capacity (L)	288 / 288	618	618
	Exterior dimensions WxDxH (mm)	720x860x1997	720x860x1997	740x870x2017
	Interior dimensions WxDxH (mm)	2 x (600x685x700)	600x685x1505	600x685x1505
	Weight (KG)	163	133	138
	Insulation (mm)	60	60	70
	Cooling technology	forced air	forced air	forced air
	Controller model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230***	230***	230***
	Frequency (Hz)	50/60	50/60	50/60
	Power consumption (kWh/24h)	18.3	9.8	14.9
	AMP (A)	5.1	4.0	4.1
	Power (Watt)	830	550	735
	Horse power (HP)	1/2 / 1/2	5/8	1
Alarm functions	Alarm display as text - not codes	yes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes
	Probe failure alarm	yes	yes	yes
	Low battery alarm	yes	yes	yes
	Compressor failure alarm	no	no	no
Data logging & external connection	Battery backup for alarms (approx. hrs.)	72	72	72
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes
	Electronic data logger	yes	yes	yes
	RS 485 port	yes	yes	yes
	USB port for software update & data download	yes	yes	yes
Display features	Temperature chart recorder	optional	optional	optional
	Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2	2
	Password protection for turning unit on / off	yes	yes	yes
Other features	Temperature graph on display	yes	yes	yes
	Automatic defrost	yes	yes	yes
	Antifreeze function	no	no	no
	Vacuum release port	no	no	no
	Access port for external probe etc. (int. diameter mm)	optional	12	12
	Light	no	no	no
	Lock with key	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 2	4 / 2	4 / 2
	Fixed feet (pcs) / levelling feet (pcs)	no	no	no
	Sub lids / inner doors (pcs)	no	no	no
	Reversible door(s)	yes	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 4	0 / 3	0 / 3
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	16 / 8	23 / 11	23 / 11
	Max. load per shelf (kg)	30	30	30
	Adjustable drawers (pcs)	optional	optional	optional
	Max. no. of adjustable drawers (pcs)	6	8	8
	Max. load per adjustable drawer (kg)	30	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no
	Baskets (pcs)	no	no	no
	Max. no. of baskets (pcs)	no	no	no
	Max. load per basket (kg)	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no
Refrigeration & cabinet	Number of compressors	2	1	1
	Refrigerant	R290	R290	R290
	Interior cabinet material	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	painted steel / stainless steel	painted steel / stainless steel	painted steel / stainless steel
	Colour (exterior cabinet)	white / stainless steel	white / stainless steel	white / stainless steel
	Foam type	polyurethane	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no	no
	Shipping weight (KG)	228	194	208
	Shipping dimensions WxDxH (cm)	102x84x220	102x84x220	102x84x220
	Shipping volume (m³)	1.88	1.88	1.88

\* 110V/60Hz available as option