

# BIOMEDICAL FREEZERS & REFRIGERATORS



# THE ARCTIKO VISION

▶ At ARCTIKO, our vision is to pioneer innovative solutions that redefine the boundaries of cold storage and environmental sustainability. We are committed to revolutionising the way organisations preserve and protect their valuable assets, while simultaneously reducing their ecological footprint. Through cutting-edge technology, exceptional quality, and a relentless pursuit of excellence, we aim to empower our customers to achieve their objectives while contributing to a greener, more sustainable future for all.



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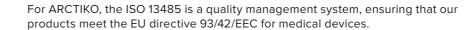
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# CERTIFICATES

#### ISO 13485

ISO 13485 is a standard for the design and manufacture of medical equipment. It is an independent standard certification that is generally harmonised 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.





#### **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

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**

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



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ACCESSORIES 36-37

#### FDA REGISTRATION

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



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# EXPLANATION OF ICONS



#### SINGLE COMPRESSOR SYSTEM

► The single compressor system consists of one compressor and one cooling cycle. This technology has a unique and simple structure that ensures easy maintenance, less heat dissipation, low

energy consumption and noise reduction. ARCTIKO manufactures a unique range, offering the best solution in the ultra-low temperature market with the single compressor system.



#### **FILTERLESS CONSTRUCTION**

▶ Filterless construction prevents complications due to dust in the filter. Dust blocks the air flow through the condenser, which reduces the unit's ability to dissipate heat effectively.

The air that bypasses the clogged air filter carries dirt into the condenser, which increases the energy used in the compressor and generates additional heat for the ambient environment.



#### TRUE DUAL™ TECHNOLOGY

▶ With the independent TRUE DUAL<sup>TM</sup> technology, your samples are protected with double security. The TRUE DUAL<sup>TM</sup> technology consists of two independent cooling systems that work together.

In the event of a failure on one of the cooling systems, the freezer will maintain the temperature of at least -70°C, meaning your valuable samples will always be stored with the best possible security.



#### **DIRECT COOLING**

▶ Direct cooling features evaporator coils in each shelf to cool each compartment directly for maximum uniformity and minimal recovery time, essentially giving you multiple small ULT freezers in one cabinet.



#### NOISE REDUCTION TECHNOLOGY

► Thanks to our newly developed noise reduction technology, we are able to reduce the noise level drastically. This technology helps provide a pleasant work environment.

The noise reduction is achieved by the implementation of our uniquely designed enclosure of the compressor compartment.



#### **FORCED AIR COOLING**

► ARCTIKO's forced air cooling provides superior temperature uniformity and stability. Forcing the airflow around the shelves and stored items ensures that all parts of the unit are equally cold and avoids any cold or hot spots. Distributed by a powerful fan and open air flow areas along the sides, the air is always distributed evenly throughout the fully loaded unit.



#### **VACUUM INSULATED PANELS**

► ARCTIKO's vacuum insulated panels are of a highly efficient quality that secures the lowest possible energy consumption.

The panels are specially developed to optimise the freezer space and to increase the efficiency and cooling performance.



#### ATEX/SPARK FREE UNIT

▶ When handling or storing flammable items in a standard biomedical refrigerator or freezer, there will be a possible ignition risk. Therefore, we at ARCTIKO, recommend storing your flammable items 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.



#### **AIRFLOW CONTROL**

▶ Airflow control is a special new construction, which enables controlled airflow around the vital components of the cooling system, securing

maximum levels of performance and the lowest possible energy consumption.



#### **MEDICAL DEVICE CLASS IIA**

▶ Depending on the purpose of the medical device and the items that will be stored inside, the classification will cover various risk products, e.g. blood.

ARCTIKO products are certified according to EU directive 93/42/EEC for medical devices and possess CE marking for Class II equipment.

# CONTROLLER DESCRIPTION

► The customer is always in mind when we are developing new products and technologies. We always strive to focus on user-friendliness, which is reflected in our controllers.

These come with a wide range of features and offer optional solutions tailored to the customer's needs.

### **G214 CONTROLLER**



The G214 controller is used on most of our units. It has been ARCTIKO's main controller for many years. With regular updates, the G214 controller has stayed ahead of the competition. The controller has all the features needed for safe storage of your valuable samples.

# V700 / V500 CONTROLLER



▶ With the new ARCTIKO controller, you will get the most user-friendly controller on the market. The new controller comes as a 7" or 5" touch screen display. The controller is upgraded with the latest technologies on the market and has all the features needed for safe storage of your valuable samples.

#### MAIN FEATURES ON THE G214 CONTROLLER

- 4.3" LCD display
- USB port for easy upload of software & download of logged data
- Extensive integrated logging capabilities with access to log directly on the display
- Monitoring of multiple alarm conditions
- Integrated memory for up to 20 years of logged data
- Multiple languages available in controller
- Battery backup for alarms, logging and temperature monitoring in case of power failure
- Auto cycle in case of probe failure
- 3 levels of password protection

#### OPTIONAL FEATURES

\* Upon Request

#### PREPARED FOR:

- Connection of 2 additional probes
- Modbus over RS485
- Connection of GSM alarm module

#### **ALARM FEATURES**

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

#### MAIN FEATURES ON THE V700/V500 CONTROLLER

- Large 7" / 5" resistive touch screen display makes it easy to access all the functions
- Self-diagnostic test
- ECO mode reducing operating costs
- Display can be operated with gloves
- Display is easy to clean no accidental button presses
- USB port for easy upload of software & download of logged data
- Extensive integrated logging capabilities with access to detailed log directly on the display
- Monitoring of power and multiple alarm conditions
- Integrated memory for 20 years of logged data
- Multiple languages available in controller
- Battery backup for alarms, logging and temperature monitoring in case of power failure
- Auto cycle in case of probe failure
- Advanced service mode
- 3 levels of password protection
- Digital temperature graph

#### OPTIONAL FEATURES

\* Upon Request

#### PREPARED FOR:

- Connection of one additional probe
- Electronic lock with access via RFID
   card
- Built-in CO<sub>3</sub> backup function
- Modbus over RS485
- Connection of GSM alarm module

#### **ALARM FEATURES**

- Visual and acoustic alarm
- Compressor alarm (TRUE DUAL™)
- Adjustable high/low temperature alarm
- Power failure alarm
- Probe failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

# EXCELLENT COOLING PERFORMANCE

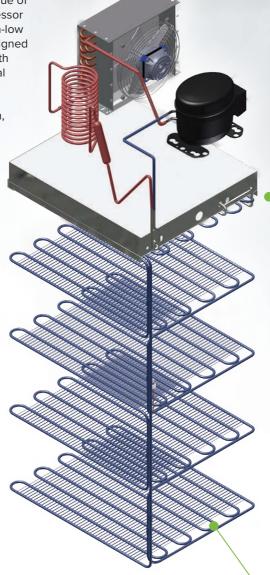
### WITH SINGLE COMPRESSOR SYSTEM

▶ Storing samples at ultra-low temperatures is a highly sensitive process, given the high value of the stored items. ARCTIKO's single compressor system offers the best solutions in the ultra-low temperature market. Our products are designed to be easy to use while being equipped with all the necessary features to ensure optimal performance and reliability.

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 ultra-low temperature freezers with a reliable and exceptionally stable temperature inside.

Our true and original single-stage technology system has a unique and simple structure which results in less maintenance, less heat dissipation, low energy consumption and noise reduction.

ARCTIKO's single compressor system consists of fewer parts and has a simplified structure of the cooling system and electrical circuit, which reduces the failure rate. The compressor compartment located in the top of our upright freezers, 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



Single compressor cooling system with only the essential parts.

Direct cooling with evaporator coils built into the shelves - for greater temperature uniformity.

#### ADVANTAGES OF ARCTIKO'S SINGLE COMPRESSOR SYSTEM

- Direct cooling in each chamber for greater temperature accuracy
- Low temperature difference from top to bottom
- Easy maintenance simple cooling system
- Low noise level
- Less heat generation
- Reduced maintenance of compressor compartment due to filterless construction

# WHAT'S YOUR BACK-UP PLAN

### IF YOUR FREEZER FAILS?

▶ Do not risk the safety of your samples due to the potential of a freezer breakdown. With ARCTIKO's TRUE DUAL™ technology, you can avoid the problems caused by unexpected freezer failures. This allows you to focus on what matters most: your valuable samples. Avoid the significant risk of losing years of valuable research due to unreliable equipment.

ARCTIKO's TRUE DUAL™ technology differs significantly from the conventional cascade refrigeration system in terms of fundamental design and operation. The TRUE DUAL™ technology consists of two independent cooling cycles. In the rare event of a failure or breakdown in one of the cycles, the other system will act as a backup, ensuring that your samples remain protected and maintained at a minimum of -70°C.

The TRUE DUAL™ technology together with the direct cooling ensures that ARCTIKO's ultra-low temperature freezers are known for their reliability and exceptional uniformity.

Investing in high-quality laboratory equipment that meets established regulatory standards is crucial. ARCTIKO's products help reduce costly downtime, allowing you to focus on what matters most: your research.

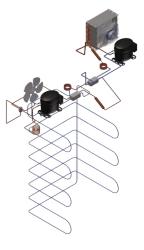
#### TRUE DUAL™ TECHNOLOGY

- ► The TRUE DUAL™ technology consists of two independent cooling cycles. In the unlikely event of an unexpected failure or breakdown on one of the cycles, the other system will serve as backup, guaranteeing that your samples will be protected and kept at least at
- Double security for samples
- No stress and problems involved
- No costly downtime situations
- Faster recovery after openings • No need for backup freezer
- Longer lifespan
- Fast pull down time
- Direct cooling on shelves
- Great temperature uniformity



#### **CASCADE SYSTEMS**

- ▶ In a cascade system, the two compressors depend on each other to reach -80°C. In case of failure on one compressor, the temperature will rise and potentially destroy the samples. Samples should be moved into a backup freezer to be safe.
- No extra security
- · Need of backup freezer when the system breaks down
- Extra frustrations
- · No direct cooling on each shelf
- · Can be costly in the long run





# UNIFORM AND STABLE CRYOGENIC FREEZER FOR LONG TERM STORAGE

# ENVIRONMENTALLY FRIENDLY AND ECONOMIC ALTERNATIVE

▶ ARCTIKO is proud of the innovative cryogenic freezer for long-term preservation of cells, tissues and other scientific samples. In recent years, storage in mechanical cryogenic freezers has replaced cryogenic storage in LN₂ to avoid cross-contamination and to provide a more environmentally friendly, safe and cost-efficient alternative. A cryogenic freezer eliminates the continuous cost of LN₂ storage maintenance and avoids hazardous operating conditions.

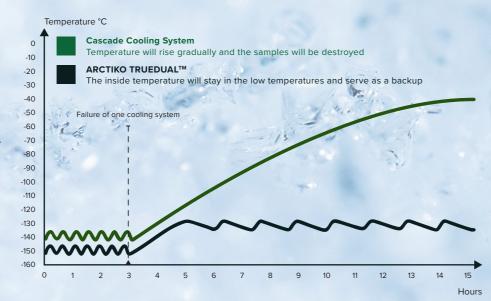
Our cryogenic freezers are designed for a wide variety of applications, such as research and long-term storage applications for low-temperature scientific experiments, preservation of cells, DNA, bone material, bacteria and similar samples.

#### SUPERIOR COOLING PRECISION

▶ The -150°C cryogenic freezers are among the most energy efficient compared with similar products. At less than 34 kWh/24h, no other -150°C product can come close to such a low energy consumption, ensuring that ARCTIKO CRYO freezers offer class-leading low total cost of ownership.

Thanks to ARCTIKO's TRUE DUAL™ technology, security is stronger than ever. In the unlikely event that one cooling system should fail, the second cooling system will maintain the freezer at a minimum of -130°C. The highly reliable cooling technology results in superior cooling precision and uniformity, even with multiple door openings.

# GO WITH TRUE DUAL<sup>TM</sup> COOLING TECHNOLOGY FOR EXTRA SECURITY



# CRYOGENIC FREEZERS

#### BENEFITS

# ARCTIK® CRYO

- Designed for long-term cryogenic preservation
- Safer and more convenient than LN<sub>2</sub> cryotanks
- ARCTIKO's TRUE DUAL™ technology keeps the samples safe at all times
- Low energy consumption, less than 34 kWh/24h
- Security has never been better with the optional  ${\rm LN_2}$  backup system the samples are protected against power failures and unexpected problems
- $\bullet$  Dramatically improved temperature uniformity compared to  $\mathrm{LN}_2$  cryotanks
- Eliminates the need for supply of  $\mathrm{LN}_2$  and all the associated stress
- Reduces cost of ownership compared with the LN<sub>2</sub> cryotanks
- Avoid potential cross-contaminations due to improper storage of samples

Maximum storage capacity with up to 14,000 samples in ARCTIKO 10x10 50 mm boxes





**TECHNOLOGY** 

TRUE DUAL™ FILTERLESS

CONSTRUCTION



REDUCED COST

REDUCED STORE UP TO NOISE LEVEL\* 14.400 SAMPLES

REDUCED COST

MODEL	CRYO 1 70	CRYO 230
Dimensions exterior W×D×H (mm)	1580 x 960 / 1135** x 1090	1760 x 960 / 1135** x 1090
Capacity (L)	171	233
Temperature range (°C)	-140/-150	-140/-150
Power Consumption (KWh/24)	31.7	33.5
Total capacity of 50 mm boxes (pcs)	108	144
Max. no. of samples (pcs)	10.800	14.400
Controller	TTM-004	TTM-004

<sup>\*</sup> Compared with similar products on the market
\*\* Depth of 1135 mm includes distance fittings on back for correct air circulation

# Integraline ULT Range

# ULTRA LOW TEMPERATURE FREEZERS DEVELOPED FOR THE MOST CRITICAL USERS

▶ Our Integraline ULT range is developed to meet the demanding needs of critical applications across a wide range of industries. The Integraline range includes four upright models with a capacity from 385L to 819L alongside four compact space saving models ranging from 7L to 88L. Known for exceptional energy efficiency, the Integraline range offers some of the lowest power consumption on the market. Equipped with advanced safety features, consistent temperature measurements ensure exceptional reliability and protection for sensitive materials.

# PRECISE TEMPERATURE CONTROL YOU CAN TRUST

▶ While competitor freezers may experience temperature fluctuations, especially after frequent use, the Integraline ULT range maintains temperature stability down to -86°C. Thanks to advanced cooling technology and rapid recovery performance, these freezers rotect delicate materials from temperature spikes.

protect delicate materials from temperature spikes. Uniform temperature distribution across the unit ensures consistent conditions, setting a new benchmark for temperature precision.

#### FLEXIBLE CAPACITY, COMPACT DESIGN

From space-saving benchtop models to high-capacity upright units, the Integraline ULT range offers scalable storage. Thoughtfully designed interiors maximise space efficiency without sacrificing temperature performance, ensuring versatility for laboratories, hospitals, and research facilities of all sizes.

# ULTRA-LOW POWER, MAXIMUM EFFICIENCY

Engineered for sustainability, these freezers utilise only natural refrigerants and feature advanced compressor technology and superior insulation to significantly reduce power consumption while maintaining stable -86°C temperatures. With lower operating costs

and a minimised environmental impact, the Integraline ULT range is a smart, energy-efficient choice.

TRUE DUAL™ SAFETY FOR

#### **CONTINUOUS PROTECTION**

Our upright models offer our TRUE DUAL™ compressor technology providing built-in redundancy. With two independent compressors working in tandem, if one compressor fails, the second continues cooling, ensuring continued protection in the event of a fault. This system offers unmatched reliability, ensuring sample integrity for critical applications in research and healthcare that most traditional cascade systems can't match.

#### SUPERIOR TEMPERATURE UNIFORMITY

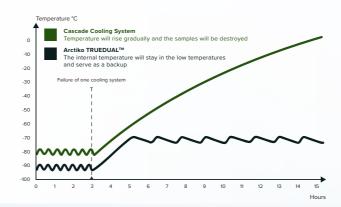
Not all ULT freezers deliver uniform temperature performance—but the Integraline range does. With precision airflow engineering and advanced insulation, these units eliminate hot and cold spots, ensuring every shelf stays within strict temperature tolerances. Whether you're storing pharmaceuticals,

whether you're storing pharmaceuticals, biological samples, or critical materials, the temperature uniformity of Integraline units gives you confidence that everything inside is equally protected.

Our multi-voltage freezers have the innovative capacity to operate across a broad spectrum of power supplies, ranging from 110 to 240 volts. This feature ensures that the multi-voltage freezers can be seamlessly integrated into various settings worldwide without the need for additional power adapters or transformers. The multi-voltage functionality enhances the freezer's adaptability to different electrical standards and significantly increases their resilience to power fluctuations, ensuring the safe and stable storage of sensitive materials.

# RELIABLE AND HIGHLY EFFICIENT TECHNOLOGY FOR ENHANCED SECURITY

► No other manufacturer comes close to the performance of the ARCTIKO upright Integraline with the independent **TRUE DUAL**<sup>TM</sup> technology providing the utmost security within ULT freezers worldwide. It boasts a pull-down time of less than three hours, along with additional security measures for peace of mind.



In the event of any failure with one of the cooling cycles, the other system will still maintain the temperature at a minimum of -70°C. This means that your samples will not be affected by any challenges caused by an unexpected failure.

#### **KEY FEATURES AT-A-GLANCE**

Superior Sample Security: Our TRUE DUAL™ and inverter compressors offer unmatched reliability, surpassing competitor ULT models. This advanced system ensures your samples are protected with confidence, minimising risks other systems can't.

**Industry-Leading Speed:** Achieves the fastest pull-down time on the market—under 3 hours—delivering unmatched efficiency even with multiple door openings.

**Cost-Effective Ownership:** Offers a low initial purchase price paired with affordable ongoing maintenance, maximising value over time.

**Tailored Capacity Options:** A wide range of sizes including compact space saving and large uprights ensures the perfect solution for your specific storag needs.

**Air-Shippable Convenience:** Select models in this range, containing less than 100g of gas, meet air shipping requirements, enabling faster delivery.





# **ULTRA LOW TEMPERATURE FREEZERS** DEVELOPED FOR THE MOST CRITICAL USERS

▶ Your valuable samples deserve a safe and stable environment where temperature fluctuations are simply not an option. Fragile and costly, these samples require reliable equipment that can withstand frequent door openings without compromising their integrity.

The Integraline ULT range delivers exactly that, with a powerful refrigeration system that boasts an impressively short pull-down time, thanks to its robust insulation and a potent combination of polyurethane and vacuum-insulated panels.

Even with continuous door openings, it rapidly restores temperature uniformity creating a highly reliable environment that's not being affected by ambient temperature.

Its exceptional temperature recovery properties define its performance. The slower hold-over time highlights the freezer's robust insulation and its ability to maintain constant temperatures while swiftly restoring uniformity after door



RELIABLE AND SECURE SAMPLE STORAGE



INDUSTRY-LEADING PULL-DOWN TIME



COST-EFFECTIVE **OWNERSHIP** 



RANGE OF CAPACITY OPTIONS



CONVENIENCE

#### STORAGE OF SENSITIVE SAMPLES

When storing sensitive samples, stable temperature inside your unit is essential. Some customers need to monitor the temperature through external devices in line with higher requirements. In our Integraline ULT range, we have included premade access ports for an easier installation of an external probe or monitoring devices. Moreover, the new Integraline ULT range can be connected to several optional accessories, to optimise the unit for any laboratory application.

#### **APPLICATION**

Ultra low-temperature freezers have a wide application range for both biological and biotech storage. Whether you are in the medical field, life sciences, plastics, food, or electronic components industry, these freezers are perfect for your application's needs. Our Integraline ULT range offers suitable storage for a wide range of applications including biological samples such as DNA/RNA, plant samples, insect artifacts, autopsy materials, blood, plasma and much more.

#### **NATURAL REFRIGERANT**

▶ We have strongly committed ourselves to the responsible use of natural resources and clean technologies by using ecofriendly alternatives.

Our natural refrigerants include extremely low GWP (Global Warming Potential) values and ODP (Zero Ozone Depletion Potential).

Our tried and tested environmentally friendly CFC-free and HCFC-free refrigerants guarantee a potent and powerful

system securing your valuable samples, but without compromising our Earth's safety in the process. These refrigerants don't produce harmful fumes and they are considered to be the ultimate solution to the environmental contamination produced by synthetic refrigerants.

Even though they are environmentally friendly, they consume significantly less energy without compromising the cooling system, making it cost effective as well. Our environmentallysafe refrigerants share strong thermodynamic properties creating high performance along the way.

#### **V700 CONTROLLER**

▶ The first-class V700 controller is equipped with all necessary alarms and features needed for you application. On top of everything, we developed ECO mode to reduce energy consumption while maintaining optimum uniformity for the stored materials.

#### **DETACHABLE INNER DOORS**

▶ We designed the upright models with easily accessible compartments including four removable inner doors that are individually insulated with magnetic catches. This smart function also guarantees easy defrosting and effortless maintenance of the unit.

#### **DOUBLE DOOR GASKETS WITH OPTIMAL INSULATION**

▶ Heated door frame, insulated door and specially designed double door gaskets ensuring close tightening and prevents ice from building up.

#### **ONEGRIP™ HANDLE**

▶ Ergonomic door handle enables onehanded door operations. Your security will be doubled thanks to both the integrated lock inside the handle and the RFID smart lock Card Key (available separately).

#### PREMADE ACCESS PORT

At ARCTIKO, we pay particular attention to the stability of the inside temperature for storing your sensitive samples. Some customers need to monitor the temperature through external devices in line with higher requirements. For that reason, we have up to 4 premade portholes, depending on the model, for an easier installation of an

external probe or monitoring device.

#### STRONG AND **DURABLE CASTORS**

► At ARCTIKO, our designers have developed castors that offer superior durability and strength. These castors meet the highest requirements, making them unmatched in the market.

#### **FLEXIBLE SHELF LAYOUT**

▶ The Integraline ULT range has multiple shelf configurations. Our middle shelf is equipped with direct cooling. Additionally, organising the interior to fit your samples is now effortless because of the use of existing racks or ARCTIKO's highly durable stainless steel racks, 10x10 cryoboxes, and organising vials.



▶ The new Integraline, designed for the most critical users, surpasses competitor models with its advanced **TRUE DUAL**™ cooling. This system's two independent cooling systems ensure maximum security.

In the event of an unexpected failure in one system, the other will continue to maintain a freezer temperature of at least -70°C, protecting your valuable samples. Thanks to our highly reliable **TRUE DUAL™** technology, your samples remain safe from any disruptions until service is provided.

# **DURABLE AND RELIABLE**ULTRA LOW TEMPERATURE FREEZERS





# **ULT Range**

### ULT COMPACT DESIGN

▶ The new **compact** Integraline is developed to provide your laboratory with advanced and reliable performance.

The **compact** space-saving design and low noise level make it a perfect storage solution for your laboratory.

The **compact** Integraline undercounter models are equipped with an inverter compressor, which delivers exceptional cooling performance. This system, adjusts the compressor speed dynamically to meet cooling demands, ensuring efficient energy use, rapid recovery and consistent stability - ideal for small space ULT storage where precision and reliability are critical.



### **ARCTIKO'S ULTRA LOW TEMPERATURE FREEZERS ARE** THE COMPACT SOLUTION FOR YOUR APPLICATION

#### **ULUF P50MV ULUF P90MV ULUF P65MV** MODEL **ULUF P10MV** Dimensions exterior W×D×H (mm) 447x709x731 646x704x820 88 54 Capacity (L) -25 / -86 -25 / -86 -40 / -86 -25 / -86 2.4 4.7 4.20 Total capacity of 50 mm boxes (pcs) 500 6.000 Max. no. of samples (pcs) V500 V500 Controller V500

# **COMPACT AND SPACE-SAVING UNDERCOUNTER MODELS**

#### **BENEFITS**

- Outstanding cooling performance with the true and original single cooling system.
- Compact space saving design makes the undercounter ULT's the perfect storage solution for laboratories with limited space.
- Inverter compressor technology with a simple structure ensures easy maintenance, lower heat dissipation, low energy consumption and noise reduction for a pleasant work environment.
- Direct cooling for optimised temperature stability and uniformity, and

**ULUF P10MV & ULUF P65MV** feature less than 100g of gas.

**SUITABLE FOR AIR TRANSPORT** 



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SINGLE INVERTER COMPRESSOR SYSTEM

**VACUUM** INSULATED PANELS





FILTERLESS CONSTRUCTION

DIRECT COOLING



MULTI VOLTAGE 110-240V 50-60Hz



VARIABLE SPEED COMPRESSOR

# ULT CHEST FREEZERS

▶ The ULTF range shows that high performance freezing with focus on low energy consumption is the future. The range features our G214 ARCTIKO controller, which ensures that all alarm and data logging features are included as standard. The ULTF range is produced with true and original single compressor uniformity. technology, which ensures great temperature stability for the safety of your samples.

SYSTEM

The chest freezer will store your samples under optimal conditions even when opening the freezer several times reliable low-temperature freezing and maximum temperature

throughout the day. The single compressor technology provides

# NATURAL REFRIGERANT **BENEFITS** • Single compressor technology with a simple structure that ensures easy maintenance, lower heat dissipation, low energy consumption and noise reduction for a pleasant work environment. • Insulated sub lids to minimise cold loss during door -86°C in less tha 90 mins! Optimal storage capacity and overview of the stored samples with the stainless steel front SINGLE rack storage system COMPRESSOR CONSTRUCTION REDUCTION

MODEL	ULTF 80	ULTF 220	ULTF 420	
Dimensions exterior W×D×H (mm)	556x641x887	925x691x891	1564x691x891	
Capacity (L)	71	189	368	1
Temperature range (°C)	-40/-86	-40/-86	-40/-86	
Power consumption (KWH/24)	5.5	5.9	8.5	
Total capacity of 50 mm boxes (pcs)	40	117	282	
Max. no. of shelves (pcs)	-	-	-	
Max. no. of samples (pcs)	4.000	11.700	28.200	
Controller	G214	G214	G214	

TECHNOLOGY

# LOW-TEMPERATURE CHEST FREEZERS

▶ The LTF range ensures reliable low-temperature freezing and high temperature uniformity. Standard features include digital display, alarms, contact for remote alarm and castors.

The chest freezer will store your samples under optimal conditions even after opening the freezer several times throughout the day.

#### **BENEFITS**

• Single compressor technology with a simple structure that ensures easy maintenance and has low energy



CONSTRUCTION

COMPRESSOR

SYSTEM

REDUCTION **TECHNOLOGY** 

LTF 85	LTF 225	LTF 325	LTF 535	
552x648x850	720x698x890	1262x698x890	1662x758x932	
71	133	284	476	
-30 / -60	-30 / -60	-30 / -60	-30 / -60	
5.1	6.0	6.9	6.9	
40	117	216	309	
2	3	12	15	
4.000	11.700	21.600	30.900	
Dixell	Dixell	Dixell	Dixell	



# 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 require pharmaceutical companies and pharmacies to document all drugs stored below a certain temperature. Choosing an ARCTIKO product offers a significant advantage with its controller, equipped with all the necessary features. Notably, the data logger with memory and on-screen graphs are crucial features that pharmacies rely on for accurate temperature documentation.

The ARCTIKO biomedical range offers a wide variety of solutions, from 55-liter undercounter models to 1381 liters of effective capacity. Each freezer and refrigerator is preprogrammed at the factory with optimal controller settings and cooling parameters for user-friendly operation.

All products in the ARCTIKO biomedical range feature flexible interiors to meet various storage requirements. You can choose from a variety of shelf and drawer options or create your own customised 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 is to prevent the vapor or particles of the substances from escaping their container and ignition of non spark free items.







true cooling specialists

# PRE BIOMEDICAL REFRIGERATORS

▶ The Flexaline series of PRE refrigerators has been intricately engineered to fulfill the vital criteria demanded by biomedical applications, while still ensuring an exceptional level of competitiveness in pricing.

This glass door range offers a variety of storage capacities, enabling you to find the perfect model for your needs.

With precise temperature controls and advanced technologies, these refrigerators play a crucial role in preserving the efficacy of medical supplies and contributing to scientific advancements.

ARCTIKO's Flexaline range is unique in this field with an integrated data logger for extra security.

# +2/+8°C 50... i P.F. B. 16.0.9 OF STREET BEAUTIFUL OF STREET

# GLASS DOOR REFRIGERATOR

# **NEW PRODUCT RANGE**





LOGGER







COOLING







	Y						
MODEL		PRE 60	PRE 125	PRE 285	PRE 380	PRE 490	
Dimensions exterior WxDxH (mm)		518x598x654	608×610×805	608x610×1525	608x698x1840	780x710x1950	
Capacity (L)		60/60	121 / 109	285 / 265	400/395	503 / 488	
Temperature range (°C)	//	+2 / +8	+2 / +8	+2 / +8	+2 / +8	+2 / +8	
Power consumption (KWH/24)		1.5	2.0	2.4	3.0	3.2	
Max. no. of shelves (pcs)		2/2	3/3	6/6	7/7	7/7	
Max. load per shelf (kg)		15	20	20	24	31	
Controller		Honker / NTC					

# LFE BIOMEDICAL FREEZERS

### **NEW PRODUCT RANGE**

▶ The Flexaline series of LFE freezers has been thoughtfully crafted to meet the essential requirements for biomedical applications, all while offering extremely competitive pricing.

This series includes a variety of storage capacity, allowing you to pick the ideal model for your requirements.

With precise temperature settings and modern technology, these freezers are critical in maintaining the efficacy of medicinal supplies and laboratory materials.

# **BENEFITS** Our products are Energy Star certified, guaranteeing exceptional energy efficiency and reduced environmental impact while maintaining LFE 490 ▼ superior performance in temperature-sensitive storage applications. • Our units come with a built-in data logger, LFE 285 ▼ lock, adding an extra layer of protection for valuable contents and preventing unauthorised **USB PORT ADJUSTABLE** LOGGER COOLING SHELVES

MODEL	LFE 60	LFE 125	LFE 285	LFE 380	LFE 490	
Dimensions exterior WxDxH (mm)	518×598×654	608×610×805	608×610×1525	608x698x1840	780×710×1950	
Capacity (L)	65 / 65	118 / 118	285 / 285	400 / 400	520 / 491	913
Temperature range (°C)	-25 to -10	1				
Power consumption (KWH/24)	1.4	1.9	2.3	2.7	3.1	
Max. no. of shelves (pcs)	2/2	3/3	6/6	7/7	7/7	
Max. load per shelf (kg)	15	20	20	24	31	
Controller	Honker / NTC					

# LRE BIOMEDICAL REFRIGERATORS

### **NEW PRODUCT RANGE**

▶ Within the Flexaline family, LRE refrigerators have been carefully designed to meet the critical specifications necessary for biomedical applications, all the while maintaining a highly competitive price point.

This solid door range offers a variety of storage capacities, enabling you to find the perfect model for your needs.

With precise temperature controls and advanced technologies, these refrigerators play a crucial role in preserving the efficacy of medical supplies and contributing to scientific advancements.



LRE 60	LRE 125	LRE 285	LRE 380	LRE 490	
518x598x654	608x610x805	608x610×1525	608x698x1840	780×710×1950	
60 / 60	121 / 109	285 / 265	400/395	503 / 488	
+2 / +8	+2 / +8	+2 / +8	+2 / +8	+2 / +8	
1.4	1.9	2.3	2.7	3.1	
2/2	3/3	6/6	7/7	7/7	
24	31	15	24	31	
Honker / NTC					



# BIOMEDICAL FREEZERS & REFRIGERATORS

▶ The Flexaline+ range includes all the features of the Flexaline series, but with an advanced Bluetooth controller, a stainlesssteel interior and enhanced temperature stability and uniformity. ARCTIKO's eco-friendly LF, LR, and PR series make up the Flexaline+ range, delivering flexibility, security, and reliability with low energy consumption. Our LF freezers and LR/PR

refrigerators are equipped with integrated data loggers that ensure precise temperature regulation and monitoring. Key features include an integrated data logger with Bluetooth connectivity, high/low-temperature alarms, and open-door alerts, providing users with enhanced control and peace of mind.







#### 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.
- Glass doors and interior LED light offer a good overview of your samples and helps reduce door opening time.
- Door lock on all models for optimal security of your samples.
- Stainless steel interior for good hygiene and easy cleaning.
- Automatic defrost for the best temperature stability and uniformity ensures the integrity









AIR FORCED COOLING

ADJUSTABLE SHELVES

**VARIOUS SAFETY FEATURES** 

MODEL	LR 650	LR 1350	PR 650	PR 1350	LF 650	LF 1350
Dimensions exterior W×D×H (mm)	2711 x 787 x 2007	1448 × 787 × 2007	711 × 787 × 2007	1448 × 787 × 2007	720 × 800 × 2010	1440 × 800 × 2010
Capacity (L)	614	1348	614	1348	614	1348
Temperature range (°C)	+2 / +8	+2 / +8	+2 / +8	+2 / +8	-25 / -10	-25 / -10
Max. no. of shelves (pcs)	6	12	6	6	6	12
Max. load per shelf (kg)	45	45	45	45	45	45
Controller	Carel IJS	Carel IJS	Carel IJS	Carel IJS	Carel IJS	Carel IJS

DATA LOGGER







COOLING

AIR FORCED **ADJUSTABLE** 

SHELVES



**FEATURES** 



# WHAT'S YOUR BACK-UP PLAN, IF YOUR BLOOD BANK REFRIGERATOR FAILS?

▶ Blood is an important resource and the safety of it should not be put at risk. Avoid the problems and headaches caused by an unexpected breakdown of your Blood Bank refrigerator and spend your time on what's more important.

ARCTIKO has added additional security in the form of TRUE DUAL $^{\text{TM}}$  technology to the BBR-D range, so that the temperature will be maintained even in the event of an unexpected failure.

#### **BENEFITS OF THE BBR/BBR-D RANGE**

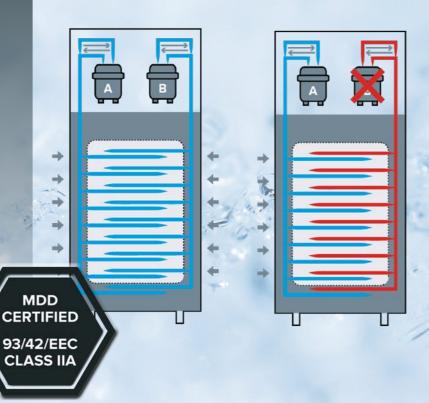
- Medical device approved
- TRUE DUAL™ technology (-D range)
- 3-level protection (Dixel, G214 and temperature chart recorder)
- Automatic door closing and door lock
- Forced air cooling
- Telescopic drawer
- Right hand hinged reversible door
- Stainless steel interior

#### OPTIMUM SAFETY WHEN STORING BLOOD

▶ TRUE DUAL<sup>™</sup> technology with two separate and independent cooling systems in combination with the advanced ARCTIKO controller, provides extreme security where needed. All important controller features, such as a data logger and alarms, are included as standard.

If one of the independent cooling cycles unexpectedly fails, the other system maintains a stable temperature of +4°C and the blood will stay protected.

It is important to invest in the correct quality equipment, to meet the established regulatory standards. ARCTIKO's quality equipment will reduce the frequency of costly downtime situations.



# BLOOD BANK REFRIGERATORS

▶ Our Blood Bank refrigerators are the best choice for safe storage of blood due to their exceptional temperature uniformity and reliable technology. The double pane glass door offers an optimal overview of the interior and with the telescopic drawers, the blood bags are easily accessible. The valuable blood is well protected and monitored in our Blood Bank refrigerators, ensuring the high quality of your blood bags at all times. The BBR models come with an advanced controller, an integrated non-manipulative data logger with USB read-out and a chart recorder as standard.



MODEL	BBR 100 / -D	BBR 300 / -D	BBR 500 / -D	BBR 700 / -D	BBR 1400 / -D
Dimensions exterior W×D×H (mm)	610x659x790	520x690x1997	620x860x1997	720×860×1997	1440x860x1997
Capacity (L)	94	352	523	628	1381
Temperature range (°C)	+4	+4	+4	+4	+4
Power Consumption (KWH/24)	4.3	6.4	7.7	8.5	10.5
Max. no. of adjustable drawers (pcs)	2	8	8	8	16
Max. load per adjustable drawer (kg)	30	30	30	30	30
Max. no. of blood bags - by standard no. of adj. drawers (pcs)	72	150	240	300	600
Max. no. of blood bags - by max. no. of adj. drawers (pcs)	72	240	384	480	960

# AUTOMATED TEMPERATURE MONITORING

# FOR COLD STORAGE MANAGEMENT

➤ ARCTIKO has collaborated with EasyLog, renowned for its expertise in automated temperature monitoring solutions, to offer meticulously tailored temperature monitoring solutions designed to safeguard temperature-sensitive materials within ARCTIKO's refrigerators and freezers.

EasyLog specialises in providing critical monitoring systems vital for ensuring the safety and integrity of sensitive materials,

including vaccines and medications. EasyLog's IoT temperature monitoring devices continuously gather data, promptly sending out email or SMS alerts for any temperature deviations and offering comprehensive historical reports, assisting organisations striving to meet the stringent quality and safety standards of today's regulatory environment.

#### **AUTOMATED TEMPERATURE MONITORING**

▶ For the enhanced safety and preservation of temperaturesensitive materials, the adoption of data loggers, together with the existing temperature monitoring solutions from ARCTIKO in cold storage units, is a recommended practice.

Introducing supplementary devices such as the EL-ARC-01 and EL-ARC-02, adds an extra layer of protection, further enhancing the reliability and safety of your stored items. While the builtin systems found in refrigerators and freezers play a vital role in temperature control, introducing independent data logging

solutions adds an extra level of security. Allowing you to stay inline with regulatory standards.

Data logging devices are designed to swiftly detect even the slightest temperature fluctuations, ensuring that any deviations are promptly addressed minimising potential inventory damage. By adopting this dual-layered approach to temperature monitoring, you reinforce both the security and quality control within your cold storage.

#### **EASYLOG MONITORING SOLUTIONS**

▶ The EL-ARC-01 and EL-ARC-02 monitoring solutions are designed to elevate the security and reliability of ARCTIKO's refrigeration and freezer units, offering a range of exceptional benefits for users.

The EL-ARC-01 is designed for low temperature environments, perfectly suited for temperatures down to -40°C, whereas the EL-ARC-02 excels in Ultra Low Temperature settings, capable of monitoring environments as cold as -150°C. These high-accuracy wireless devices both feature crystal clear LCD screens displaying current, minimum, maximum temperatures and come

equipped with an alert system including sounder, visual alarm and warning light (included in the EL-ARC-01) to make sure you never miss a temperature breach.

Additionally, these devices are easily calibrated to maintain precise temperature measurement, ensuring accuracy in critical storage environments. Data from these devices is uploaded periodically using a 2.4GHz Wi-Fi network to the EasyLog Cloud.

#### **IOT MONITORING SYSTEMS**

➤ The EasyLog Cloud is an invaluable asset for users of EasyLog's wireless data loggers, including the EL-ARC-01 and EL-ARC-02.

This powerful platform enables remote access to critical temperature data and monitoring insights from any location, granting users real-time visibility and control over their temperature-sensitive inventory. Instant email or SMS notifications from the Cloud ensure proactive management and

protection of your inventory. The detailed audit trail functionality further enhances precision to monitoring activity and events.

EasyLog Cloud transforms data management into a streamlined, efficient, and highly accessible process. Users gain a critical advantage in ensuring the integrity of their temperature-controlled environments, enhancing quality assurance and operational efficiency.



#### EL-ARC-01



#### **COMPATIBLE WITH:**

-10/-40°C Biomedical freezers
-30/+10°C Combi fridge/freezers
+1/+10°C Pharmaceutical & Biomedical refrigerators
+4°C Blood bank refrigerators



#### **EL-ARC-02**



#### **COMPATIBLE WITH:**

-150°C Cryogenic freezers
-86°C Ultra-low temperature freezers
-86°C Ultra-low temperature freezers (True Dual"
-30/-60°C Low temperature freezers



#### BENEFITS

**Automated Monitoring:** Streamline temperature monitoring processes with automated systems, reducing manual efforts and ensuring consistent oversight.

**Notifications and Alerts:** Stay informed in real-time with instant email or SMS notifications and alerts, enabling timely response to temperature deviations and potential risks.

**Protection of Vaccines and Assets:** Safeguard valuable vaccines and assets by maintaining optimal temperature conditions, preserving their efficacy and integrity.

Regulatory Compliance: Meet regulatory requirements effortlessly with comprehensive temperature data logging and reporting capabilities, facilitating adherence to strict industry standards and compliance mandates.

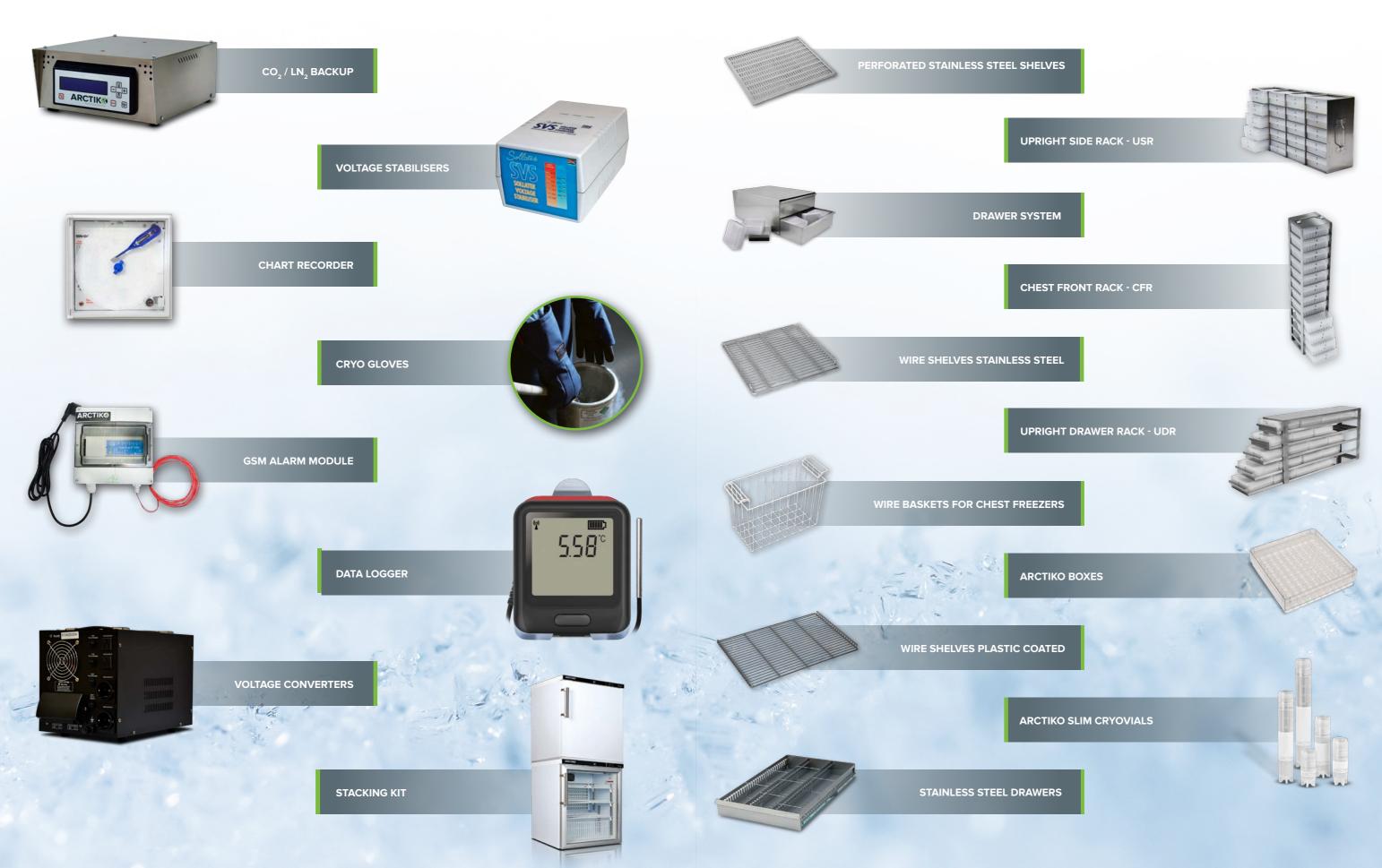
The EL-ARC-01 device comes with a buffer block, perfect fo imitating inventory temperatures inside your refrigerator or freezer.





# ACCESSORIES

# SHELVES & DRAWERS





▶ ARCTIKO, a global corporation with offices in the United Kingdom, United States, and Denmark, leads in cooling technology innovation.

With over two decades of cooling technology expertise, we are recognised as professionals in Ultra Low-Temperature freezers, Biomedical freezers and refrigerators, Cryogenic freezers, Blood bank refrigerators, and pharmaceutical

ARCTIKO is the unrivalled leader in innovative cooling and freezing solutions in healthcare and life sciences. Our edge, cooling, and freezing solutions.

Our committed teams personalise services to meet global customer demands, from specification to delivery. We ensure outstanding performance, flexible customer service, and attention to detail.

To learn more about our medical fridges or refrigeration and countries with fast worldwide deliveries from warehouses in

# SERVICE & SUPPORT

- ▶ Our service team combined, has more than 40 years of experience and knowledge in cooling technology and controls. We are able to answer any kind of inquiries 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

# dedication to perfection has made us renowned for cutting-

freezer storage solutions, contact us today. We serve over 100 Asia, Europe, and the US. The ARCTIKO Team is here to help!

# LF 650 / 1350 LFF 660 -30/-60° LTF 85 / 225 / 325 -60° For any information on ARCTIKO International, please contact us at: sales@arctiko.com ULTF 80 / 220 / 320 / 420 ULUF P400MV / P510MV / P620MV / P830MV / P65MV -150°

# PRODUCT OVERVIEW

