# ARCTIK INT ULUF 450

true cooling specialists



### HIGHLY RELIABLE ULTRA LOW TEMPERATURE FREEZER |

The ULUF 450 Ultra low temperature freezer comes with single cooling technology that offers direct cooling and excellent cooling performance.

## **▶ RELIABLE FREEZING**

The single compressor technology provides reliable low temperature freezing and high temperature uniformity.

With the unique single compressor technology the freezer can reach -86 °C with only one compressor.

This is made possible through our special dimensions of the cooling system and our patented refrigerant.

With direct cooling of each compartment you achieve maximum uniformity and minimum recovery time.

### WORKING ENVIROMENT

By placing the compressor and other heat and noise generating components on the top of the unit the heat is distributed up- and backwards preventing the heat from warming up the entire room.

This design also means that there is never a compartment that you will have difficulties overlooking or using fully. Ensuring a ergonomically correct unit which is easy and pleasant to use.

# > FILTERLESS CONSTRUCTION

Our filterless construction makes cleaning unnecessary. The evaporator coils are spaced so far apart that dust will not be trapped and obstruct the airflow.

With our compressors located on the top, the dust intake is minimal this eliminating the need for filters entirely, saving you maintenance time and cost.





SINGLE COMPRESSOR SYSTEM



DIRECT COOLING



FILTERLESS CONSTRUCTION



The user friendly G214 controller is standard for the ULUF 450. It includes different alrams as visual, acoustic, open door and more.



Insulated inner door for better recovery time after door openings and optimal temperature stability.



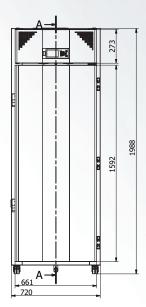
Key lock is a standard feature in our ULUF 450. Placed on side of door for optimal security for your samples.

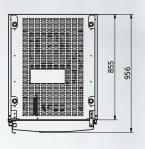


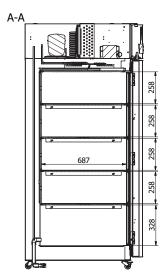
Optimal storage capacity and overview of the stored samples with the stainless steel front rack storage system



true cooling specialists







The ARCTIKO ULUF 450 model supports following optional features:

- Modbus adaptor for G214 controller
- Temperature chart recorder
- CO<sub>2</sub> back-up system
- GSM alarm module
- Voltage converter
- Voltage stabilizer
- Racks & Boxes
- Cryo gloves







	MODEL	ULUF 450-2M
	Item code	US-DAI 1408-1
	Temperature range (°C)	-40 / -86
	Temperature range (*F)	-40 / -123
	Max. ambient temperature (°C)	25
	Max. ambient temperature (°F)	77
	Capacity (L)	393
Main specifications	Capacity (cu. ft.)	13,9
fical	Exterior dimensions WxDxH (mm)	720x906x1990
peci	Exterior dimensions WxDxH (inches)	28,35x35,67x78,35
lain	Interior dimensions WxDxH (mm)	480x608x1345
2	Interior dimensions WxDxH (inches)	18,90x23,94x52,95
	Weight (kg)	206
	Weight (lbs)	454
	Insulation (mm)	120
	Insulation (inches)	4,7
	Cooling technology	single system / static
	Controller model / probe type	G214 / PT1000
	Power supply (V)	110
	Frequency (Hz)	60
Power	Power consumption (kWh/24h)	14,8
Po	AMP (A)	11,5
	Power (Watt)	820
	Horse power (HP)	3/4
	Alarm display as text - not codes	yes
	Visual / acoustic alarm	yes/yes
	Power failure alarm	yes
Alarm functions	Adjustable high / low temperature alarm	yes / yes
funct	Open door alarm	yes
m I	Probe failure alarm	yes
₹	Low battery alarm	yes
	Compressor failure alarm	no
	Battery backup for alarms (approx. hrs.)	72
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes
g		
ern a	Electronic data logger	yes
Data logging & external connection	RS 485 port	yes
٥٠٠	USB port for software update & data download	yes
	Temperature chart recorder	optional
> s	Display type	4,3" with touch buttons
E 5	Number of optional reference probes	
atr.		
Display features	Password protection for turning unit on / off	yes
Disp	Password protection for turning unit on / off Temperature graph on display	yes yes
Disp	Password protection for turning unit on / off Temperature graph on display Automatic defrost	yes
Disp	Password protection for turning unit on / off Temperature graph on display	yes yes
Disp	Password protection for turning unit on / off Temperature graph on display Automatic defrost	yes yes no
Disp	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches)	yes yes no yes
Disp	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light	yes yes no yes no
Disp	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches)	yes yes no yes no no no
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light	yes yes no yes no yes yes
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key	yes yes no yes no yes yes yes yes yes
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs)	yes yes no yes no yes no no yes 4/2
Other features Teatures	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs)	yes yes no yes no no yes 4/2 no
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs)	yes yes no yes no no yes no no yes 4/2 no 5
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s)	yes yes no yes no no yes no no yes yes 4/2 no 5
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs)	yes yes no yes no no yes no no yes yes yes 4/2 no 5 no 4/0
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg)	yes yes no yes no no yes no no yes yes yes 4/2 no 5 no 4/0 30
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed selves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg)	yes yes no no yes no no yes yes yes 4/2 no 5 no 4/0 30 66
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 50 mm / 2 inch boxes (pcs)	yes yes no no yes no no yes yes yes 4/2 no 5 no 4/0 30 66 240
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs)	yes yes no no yes no no yes yes yes 4/2 no 5 no 4/0 30 66 240 180
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs)	yes yes no no yes no no yes yes yes 4/2 no 5 no 4/0 30 66 240 180
Otherfeatures	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 96 mm / 3,8 inch boxes (pcs) Number of compressors Refrigerant	yes yes yes no no yes no no yes yes 4/2 no 5 no 4/0 30 66 240 180 120
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 75 mm / 3 inch boxes (pcs) Total capacity of 96 mm / 3,8 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material	yes yes yes no no yes no no no yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 96 mm / 3,8 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material	yes yes yes no no yes no no no yes yes 4 / 2 no 5 no 4 / 0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel
Otherfeatures	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (lbs) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 96 mm / 3,8 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet)	yes yes yes no yes no yes no no yes yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type	yes yes yes no yes no yes no no yes yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white polyurethane
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs) Total capacity of 96 mm / 3,8 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels	yes yes yes no yes no no yes no no yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white polyurethane no
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels Shipping weight (kg)	yes yes yes no yes no no yes no no yes yes  4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white polyurethane no 266
Refrigeration & cabinet Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels Shipping weight (kg) Shipping weight (lbs)	yes yes yes no yes no no yes no no no yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white polyurethane no 266 586
Refrigeration & cabinet Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 96 mm / 3.8 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels Shipping weight (kg) Shipping dimensions WxDxH (cm)	yes yes yes no no yes no no no yes yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white polyurethane no 266 586 84x104x218
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port Access port for external probe etc. (int. diameter mm) Access port for external probe etc. (int. diameter inches) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. load per shelf (kg) Max. load per shelf (kg) Total capacity of 50 mm / 2 inch boxes (pcs) Total capacity of 75 mm / 3 inch boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels Shipping weight (kg) Shipping weight (lbs)	yes yes yes no yes no no yes no no no yes yes 4/2 no 5 no 4/0 30 66 240 180 120 1 EP88 stainless steel electrogalvanized steel white polyurethane no 266 586