



## ULTRA LOW TEMPERATURE | BENCHTOP / UNDERCOUNTER FREEZER

Highly reliable compact ULT freezer with a space-saving design and low GWP due to natural refrigerant.

## ► RELIABLE FREEZING

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

The freezer can reach -86 °C with only one compressor because of the absolutely unique single compressor technology. With the direct cooling, you can successfully achieve maximum temperature uniformity and minimum recovery time.

All in all, outstanding cooling performance and ultra low GWP (Global Warming potential) due to the <u>Natural R</u>efrigerant.

## **ONE OF A KIND**

This compact ULUF P90 undercounter/benchtop model is the ideal solution for the smaller lab with limited floor space. It can store up to 500 samples, still maintaining a small footprint and reduced energy consumption, which saves money in operational costs.

The models are developed for demanding standards that need a precise and uniform temperature environment - ideal freezers for storage of DNA, RNA and other biological samples.

## **ENERGY EFFICIENCY**

The compact space-saving cabinet design guarantees a reduced footprint because of the Arctiko's specifically developed vacuum insulated panels, optimizing the freezer to increase energy efficiency and cooling performance.

The vacuum insulated panels are of a high-efficient quality that secures the lowest possible energy consumption. VIP panels combined with Arctiko's state-of-the-art single compressor technology provide a safe and high-quality ULT freezer.





It includes a well-utilized inner compartment with room for up to 6000 samples. Its interior is made of the highly durable and robust stainless steel type AISI 304 for high sample safety and easy cleaning.

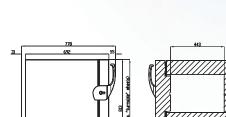


The unit is equipped with our brand new userfriendly 5" V500 controller that comes with the self-diagnostic test and ECO-mode reducing energy consumption while maintaining optimum temperature uniformity for the stored materials.



The Arctiko OneGrip<sup>™</sup> handle is designed and developed for easy and ergonomic use. Daily operational routines can be performed with a smooth and easy one-handed door opening and closing experience.

\* The pictures shown are for reference only, actual product size may vary. Please read the dimensions of the product in the specifications.



Pull-down times measures the time taken for temperature to rise, the faster the better. Hold over indication the freezers ability to keep the samples safe.

Hold over

Pull-down

258 332

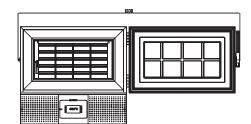
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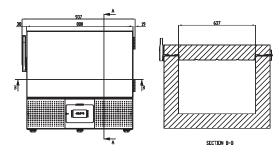
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SECTION A-A

true cooling specialists

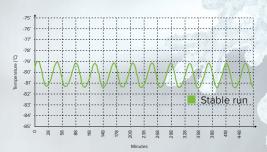




The ARCTIKO Integraline ULUF P90 Model supports following optional features:

- Modbus adapter for V500 controller
- Temperature chart recorder (external mounting)
- GSM alarm module
- Voltage converter
- Voltage stabilizer
- Racks & boxes
- Cryo gloves





	MODEL	ULUF P90
st	Item code	DAI 1830
	Temperature range (°C)	-25 / -86
	Max. ambient temperature (°C)	25
Main specifications	Capacity (L)	88
cifica	Exterior dimensions WxDxH (mm)	937x778x836
spe	Interior dimensions WxDxH (mm)	637x443x307
Main	Weight (KG)	97
	Insulation (mm)	120
	Cooling technology	single system / static
	Controller model / probe type	V500 / PT100
	Power supply (V)	230
	Frequency (Hz)	50/60
ver	Power consumption (kWh/24h)	7,0
Power	AMP (A)	4,0
	Power (Watt)	550
	Horse power (HP)	5/8
Alarm functions	Alarm display as text - not codes	yes
	Visual / acoustic alarm	yes/yes
	Power failure alarm	yes
	Adjustable high / low temperature alarm	yes/yes
	Open door alarm	yes
	Probe failure alarm	yes
Alŝ	Low battery alarm	yes
	Compressor failure alarm	yes
	Battery backup for alarms (approx. hrs.)	72
	Voltage free contact for remote alarm (e.g. GSM alarm module)	
<u> </u>	Electronic data logger	yes
erna	RS 485 port	yes
Data logging & external connection		optional
	USB port for software update & data download	yes
	Temperature chart recorder	optional (external mounting)
≥ s	Display type	5" touch screen
> s		
isplay atures	Number of optional reference probes	1
Display features	Password protection for turning unit on / off	yes
Display features	Password protection for turning unit on / off Temperature graph on display	yes yes
Display features	Password protection for turning unit on / off Temperature graph on display Automatic defrost	yes yes no
Display	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function	yes yes no no
Display	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port	yes yes no no yes
Display	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function	yes yes no no
Display	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port	yes yes no no yes
Display	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm)	yes yes no no yes 12
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) Light	yes yes no no yes 12 no
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) Light Lock with key	yes no no yes 12 no yes
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) Light Lock with key Castors (total pcs) / castors with brake (pcs)	yes yes no yes 12 no yes 2 rollers / optional
Other features features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs)	yes yes no yes 12 no yes 2 rollers / optional 0 / 2
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs)	yes no no yes 12 no yes 2 rollers / optional 0 / 2 no
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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 no yes 12 no yes 2 rollers / optional 0 / 2 no no
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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 no yes 12 no yes 2 rollers / optional 0 / 2 no no 0 / 0
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	yes yes no no yes 12 no yes 2 rollers / optional 0 / 2 no no 0 / 0 0 / 0
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / max. no. of shelves (pcs)	yes yes no no yes 12 no yes 2 rollers / optional 0 / 2 no no 0 / 0 0 / 0 0 / 0
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. load per shelf (kg) Total capacity of 50 mm boxes 9x9 didviders (pcs)	yes yes no no yes 12 no yes 2 rollers / optional 0 / 2 no no 0 / 0 0 / 0 0 / 0 60
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. load per shelf (kg) Total capacity of 75 mm boxes 9x9 didviders (pcs)	yes   yes   no   no   yes   12   no   yes   2   of   yes   2   no   yes   2   no   0/2   no   0/0   0/0   0/0   0/0   0/0   0/0   0/0   36
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. load per shelf (kg) Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs)	yes   yes   no   no   yes   12   no   yes   2   o   yes   2   no   yes   2   no   0/2   no   0/0   0/0   0/0   0/0   0/0   0/0   36   24
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed faet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs) Reversible door(s) Fixed shelves (pcs) / adjustable shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. load per shelf (kg) Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors	yes   yes   no   yes   12   no   yes   2 rollers / optional   0 / 2   no   0 / 2   no   0 / 0   0 / 0   0 / 0   36   24   1
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Yacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. load per shelf (kg) Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant	yes   yes   no   yes   12   no   yes   2 rollers/optional   0 / 2   no   0 / 2   no   0 / 0   0 / 0   0 / 0   36   24   1   Nature R
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Yacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / mm boxes 9x9 didviders (pcs) Total capacity of 50 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material	yes   yes   no   no   yes   12   no   yes   2 rollers / optional   0 / 2   no   0 / 0   0 / 0   0 / 0   0 / 0   60   36   24   1   Nature R   stainless steel
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet)	yes   yes   no   no   yes   12   no   yes   2 rollers / optional   0 / 2   no   0 / 0   0 / 0   0 / 0   0 / 0   0 / 0   36   24   1   Nature R   stainless steel   electrogalvanized steel
	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / adjustable shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material	yes   yes   no   no   yes   12   no   yes   2 rollers / optional   0 / 2   no   0 / 0   0 / 0   0 / 0   0 / 0   0 / 0   36   24   1   Nature R   stainless steel   electrogalvanized steel   white
Refrigeration & cabinet	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. load per shelf (kg) Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels	yes   yes   no   no   yes   12   no   yes   2 rollers / optional   0 / 2   no   no   0 / 0   0 / 0   0 / 0   60   36   24   1   Nature R   stainless steel   electrogalvanized steel   white   polyurethane
Other features	Password protection for turning unit on / off Temperature graph on display Automatic defrost Antifreeze function Vacuum release port Access port for external probe etc. (int. diameter mm) 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) / autoutable shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Total capacity of 75 mm boxes 9x9 didviders (pcs) Total capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Exterior cabinet material	yes   yes   no   no   yes   12   no   yes   2 rollers / optional   0 / 2   no   o   0 / 0   0 / 0   60   36   24   1   Nature R   stainless steel   electrogalvanized steel   white   polyurethane   yes



20

10° 0°

-10'

-20'

-30'

-40'

-50'

-60'

-70

-80

-90'

148 296 370 144 18 92 566 40 4 88 962 110 184

IMPROVED RECOVERY TIMES

2