

NATURAL  
REFRIGERANT



# ULUF P90

**HIGHLY RELIABLE ULTRA LOW-TEMPERATURE FREEZER. A SPACE-SAVING DESIGN AND LOW NOISE LEVEL.** It is made of high-quality components and with the single compressor technology. A perfect storage solution for your personal laboratory or when lack of space.



SINGLE  
COMPRESSOR  
SYSTEM



VACUUM  
INSULATED  
PANELS



NOISE  
REDUCTION  
TECHNOLOGY



AIRFLOW  
CONTROL



FILTERLESS  
CONSTRUCTION



DIRECT  
COOLING

## 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. Our team accomplished it through our special dimensioning of the cooling system and our outstanding patented refrigerant. With the direct cooling, you can successfully achieve maximum temperature uniformity and minimum recovery time.

## 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 6000 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.

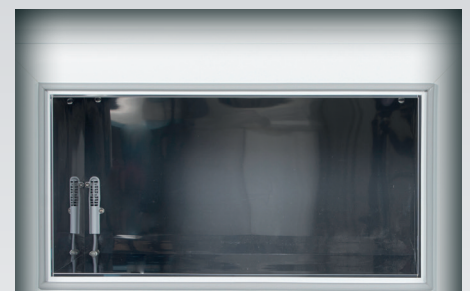
The vacuum insulated panels are of a high-efficient quality that secures the lowest possible energy consumption. VIP panels combined with Arctiko's state-of-the-art single compressor technology provide a safe and high-quality ULT freezer.



The unit is equipped with our brand new user-friendly 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™ 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.



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.

## MAIN SPECIFICATIONS

Item code	DAI 1830
Temperature range (°C)	-40 / -86
Max. ambient temperature (°C)	25
Capacity (L)	88
Exterior dimensions WxDxH (mm)	937x778x836
Interior dimensions WxDxH (mm)	637x443x307
Weight (KG)	97
Insulation (mm)	120
Cooling technology	single system / static
Controller model / probe type	V500 / PT100

## POWER

Power supply (V)	230
Frequency (Hz)	50/60
Power consumption (kWh/24H)	7,0
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
Low battery alarm	yes
Compressor failure alarm	yes
Battery backup for alarms (approx. hrs.)	72

## DATA LOGGING & EXTERNAL CONNECTION

Voltage free contact for remote alarm (e.g. GSM module)	yes
Electronic data logger	yes
RS 485 port	optional
USB port for software update & data download	yes
Temperature chart recorder	optional (external mounting)

## DISPLAY FEATURES

Display type	5" touch screen
Number of optional reference probes	1
Password protection for turning unit on / off	yes
Temperature graph on display	yes

## OTHER FEATURES

Automatic defrost	no
Antifreeze function	no
Vacuum release port	yes
Access port for external probe etc. (int. diameter mm)	12
Light	no
Lock with key	yes
Castors (total pcs) / castors with brake (pcs)	2 rollers / optional
Fixed feet (pcs) / levelling feet (pcs)	0 / 2
Sub lids or inner doors (pcs)	no
Reversible door(s)	no
Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 0
Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	0 / 0
Max. load per shelf (kg)	0 / 0
Total capacity of 50 mm boxes 9x9 dividers (pcs)	60
Total capacity of 75 mm boxes 9x9 dividers (pcs)	36
Total capacity of 96 mm boxes 9x9 dividers (pcs)	24

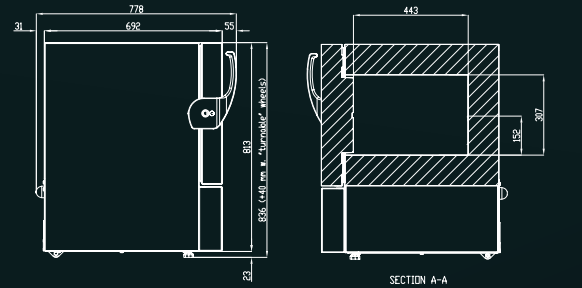
## REFRIGERATION & CABINET

Number of compressors	1
Refrigerant	Nature R
Interior cabinet material	stainless steel
Exterior cabinet material	electrogalvanized steel
Colour (exterior cabinet)	white
Foam type	polyurethane
VIP vacuum insulated panels	yes

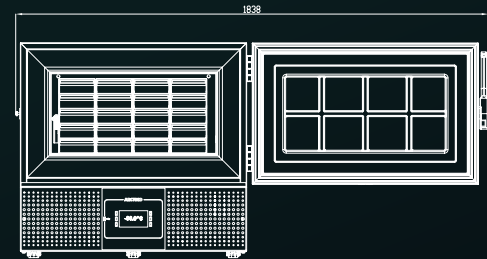
## SHIPPING

Shipping weight (KG)	137
Shipping dimensions WxDxH (cm)	83x103x103
Shipping volume (m³)	0,88

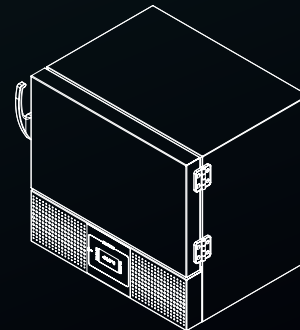
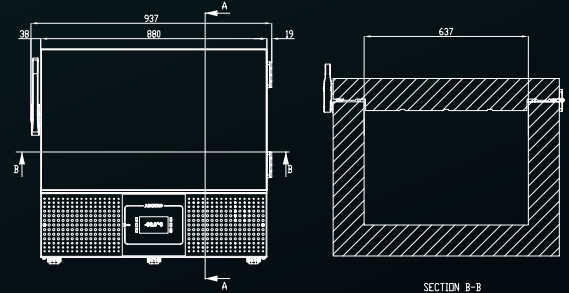
## MAIN DIMENSION FOR ULUF P90



SECTION A-A



SECTION B-B



## OPTIONAL ACCESSORIES

- Modbus adapter for V500 controller
- Temperature chart recorder
- CO2 back-up system
- GSM alarm module
- Voltage converter
- Voltage stabilizer
- Racks & boxes
- Cryo gloves