



**ULTRA LOW TEMPERATURE | BENCHTOP / UNDERCOUNTER FREEZER**  
 Designed for rigorous environments needing precise temperature regulation, this exceptionally reliable compact ULT freezer ensures your critical materials are stored securely and effectively.

### ▶ RELIABLE FREEZING

ARCTIKO's unique single compressor technology guarantees superior temperature uniformity and exceptional cooling performance, allowing you to concentrate on your research without worry. This compact ultra-low temperature (ULT) freezer not only facilitates easy access to samples but also offers flexible placement options in the workplace.

### ▶ GLOBAL COMPATIBILITY

The primary cable of this device is interchangeable, allowing it to be used globally. Switch between Schuko, NEMA, and UK plugs with ease. Additionally, there's no need for a transformer; the product is compatible with any voltage from 110V to 240V. It automatically adjusts its operation based on the voltage input.

### ▶ NATURAL REFRIGERANT

This device delivers exceptional cooling performance and is eco-friendly, boasting an ultra-low Global Warming Potential (GWP) of just 4. This excellent rating is achieved through the use of natural refrigerants, underscoring its minimal impact on global warming.

### ▶ PROBE & ACCESS PORTS

As standard, the unit is equipped with two temperature probes inside the chamber. One probe monitors the air temperature in the chamber and controls the operation of the compressors, while the other probe monitors the temperature of the stored elements, simulated through the aluminum block.

### ▶ SINGLE COMPRESSOR TECHNOLOGY

ARCTIKO's single compressor system features a filterless design, which prevents malfunctions due to dust accumulation in filters. This reduces maintenance requirements for the cooling system and ensures more stable operation.

### ▶ VACUUM VALVE AND KEY LOCK

The unit enhances security and stabilizes internal conditions with a vacuum valve and a key lock on the door. The vacuum valve efficiently equalizes pressure inside the unit, allowing for immediate access without lengthy delays.



**NATURAL REFRIGERANT  
 LOWEST GWP**

ULUF P50 MV



**SINGLE COMPRESSOR SYSTEM**



**VACUUM INSULATED PANELS**



**AIRFLOW CONTROL**



**FILTERLESS CONSTRUCTION**



**NATURAL REFRIGERANT**



Heated door frame prevents ice build up around the gasket.



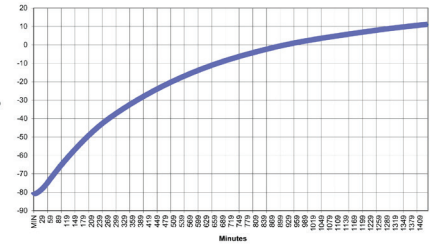
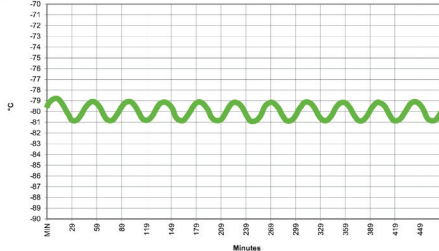
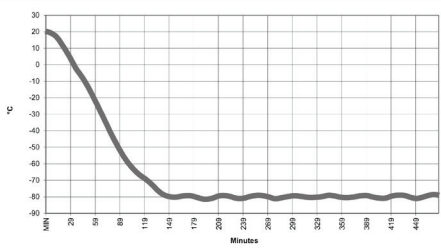
This unit includes a well-utilized inner compartment with room for up to 500 samples.



Direct cooling for optimized temperature stability and uniformity, even with multiple door openings.

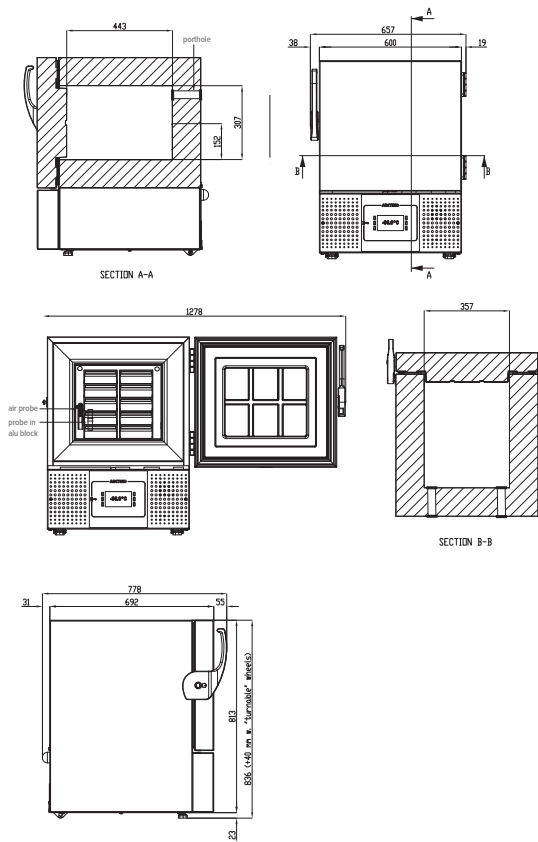


The ARCTIKO OneGrip™ handle is designed and developed for easy and ergonomic use.



### ► IMPROVED RECOVERY TIMES

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.



The ARCTIKO Integraline ULUF P50 MV Model supports following optional features:

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

| MODEL  |   | ULUF P50 MV                          |
|--|---|--------------------------------------|
| Main specifications                              | Item code   | 1000002-01                           |
|  | Temperature range (°C)  | -25 / -86                            |
|  | Max. ambient temperature (°C)                                 | 32                                   |
|  | Capacity (L)  | 50                                   |
|  | Exterior dimensions WxDxH (mm)                                | 657x778x836                          |
|  | Interior dimensions WxDxH (mm)                                | 357x443x307                          |
|  | Weight (KG)   | 82                                   |
|  | Insulation (mm)   | 120                                  |
|  | Cooling technology  | Single system / Static Inverter / MV |
|  | Controller model / probe type                                 | V500 / PT100                         |
| Power  | Power supply (V)  | 110 - 230                            |
|  | Frequency (Hz)  | 50/60                                |
|  | Power consumption (kWh/24h)                                   | 3.48                                 |
|  | AMP (A)   | 3,0 (110V) / 1,5A (230V)             |
|  | Power (Watt)  | 280                                  |
| Horsepower (HP)                                  | 3/4   |                                      |
| Alarm functions                                  | Alarm (displayed 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                                  |
| Data logging & external connection               | Compressor failure alarm                                      | Yes                                  |
|  | Battery backup for alarms (approx. hrs.)                      | 72                                   |
|  | Voltage-free contact for remote alarm (e.g. GSM alarm module) | Yes                                  |
|  | Electronic data logger  | Yes                                  |
|  | RS 485 port   | Optional                             |
| Display features                                 | USB port for software update & data download                  | Yes                                  |
|  | Temperature chart recorder                                    | Optional (external mounting)         |
|  | Display type  | 5" touch screen                      |
| Other features                                   | Number of optional reference probes                           | 2                                    |
|  | Password protection for turning unit on / off                 | Optional                             |
|  | Temperature graph on display                                  | Yes                                  |
|  | Automatic defrost   | No                                   |
|  | Antifreeze function   | No                                   |
|  | Vacuum release port   | Yes                                  |
|  | Access port for external probe etc. (int. diameter mm)        | 20                                   |
|  | Light   | No                                   |
|  | Lock with key   | Yes                                  |
|  | Castors (total pcs) / castors with brake (pcs)                | 2 / 0                                |
|  | Fixed feet (pcs) / levelling feet (pcs)                       | 0 / 2                                |
|  | Sub lids / inner doors (pcs)                                  | No                                   |
| Reversible door(s)                               | No  |                                      |
| Total capacity of 50 mm boxes 9x9 dividers (pcs) | 36  |                                      |
| Total capacity of 75 mm boxes 9x9 dividers (pcs) | 24  |                                      |
| Total capacity of 96 mm boxes 9x9 dividers (pcs) | 18  |                                      |
| Refrigeration & cabinet                          | Number of compressors   | 1                                    |
|  | Refrigerant   | Nature R2                            |
|  | Interior cabinet material                                     | Stainless steel                      |
|  | Exterior cabinet material                                     | Painted Steel                        |
|  | Colour (exterior cabinet)                                     | White                                |
|  | Foam type   | Polyurethane                         |
| Shipping   | VIP vacuum insulated panels                                   | Yes                                  |
|  | Shipping weight (kg)  | 109                                  |
|  | Shipping dimensions WxDxH (cm)                                | 83x75x103                            |
| Shipping volume (m <sup>3</sup> )                | 0,64  |                                      |



IEC 61010 / EN IEC 61010 / UL 61010 / CSA C22.2 no 61010