ARCTIKO
true cooling specialists

ULUF P820GG

-40/-86°

**ULTRA LOW TEMPERATURE | ** HIGHLY RELIABLE ULT FREEZER WITH NATURAL REFRIGERANT

The freezer comes with the extremely powerful independent **TRUE DUAL™** technology that keeps the samples protected at -70 °C if an unexpected failure occurred keeping you worry-free and the samples secured and safely guarded.

▶ EXTREMELY POWERFUL AND EFFICIENT COOLING

This model is characterized by the short pull down time of approx. 3 hours[1] indicating an exceptionally solid cooling system with robust insulation, due to the effective mixture 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. Therefore, it is essentially defined by amazing temperature recovery properties.
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[1] See below graph under "Improved recovery time".
Ambient temperature 32°C Freezer with no-load.

▶ ENVIRONMENTALLY FRIENDLY

Our natural refrigerants include extremely low ODP[1] and GWP[2] values of less than 4. Our tried and tested environmentally friendly CFC/HCFC free refrigerants guarantee potent and powerful system securing your valuable samples, but without compromising our Earth's safety in the process.

Even though they are environmentally friendly, they consume significantly less energy without compromising the cooling system, and making it cost effective as well.

Our environmentally-safe refrigerants share strong thermodynamic properties creating high performance along the way.
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[1] Zero Ozone Depletion Potential
[2] Global Warming Potential

▶ ULTIMATE SAMPLE PROTECTION

This model is developed with our advanced and innovative technologies, including the very best components to secure first-rate performance.

Do not risk the safety of your samples due to the potential breakdown of your freezer. Having our TRUE DUAL™ technology, you will avoid all the problems caused by an unexpected malfunction of the compressors. In the event of any failure on one of the cooling systems, the other system will still maintain the temperature of -70°C, meaning your valuable samples are stored with superior security all day and all night.

Don't ignore the huge risk of losing many years of your valuable research because of poor-quality laboratory equipment.

GG20

NATURAL REFRIGERANT

ULUF P820GG* ◀

Extra insulated and durable inner doors. The inner doors will provide ultimate protection and more effective insulation when the doors open.

They are all effortlessly detachable to ease and speed up the cleaning process. They are opened independently to minimize sample exposure.

TRUE DUAL™ TECHNOLOGY

25° ONEGRIP™ HANDLE

DIRECT COOLING

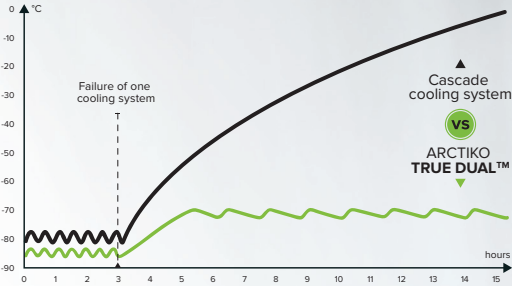**VIP** VACUUM INSULATED PANELS

AIRFLOW CONTROL

dB↓ NOISE REDUCTION TECHNOLOGY

The modernized shelves in the new Integraline are perforated and easily adjustable, offering the best flexibility for your storage needs. Extra durable shelves with up to 50 kg.
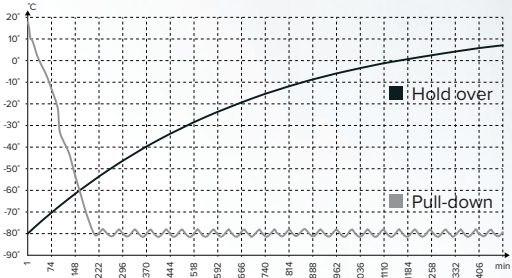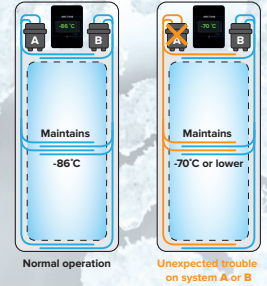
ARCTIKO ULUF P820GG
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Failure of one cooling system

Cascade cooling system

VS

ARCTIKO **TRUE DUAL™**

hours
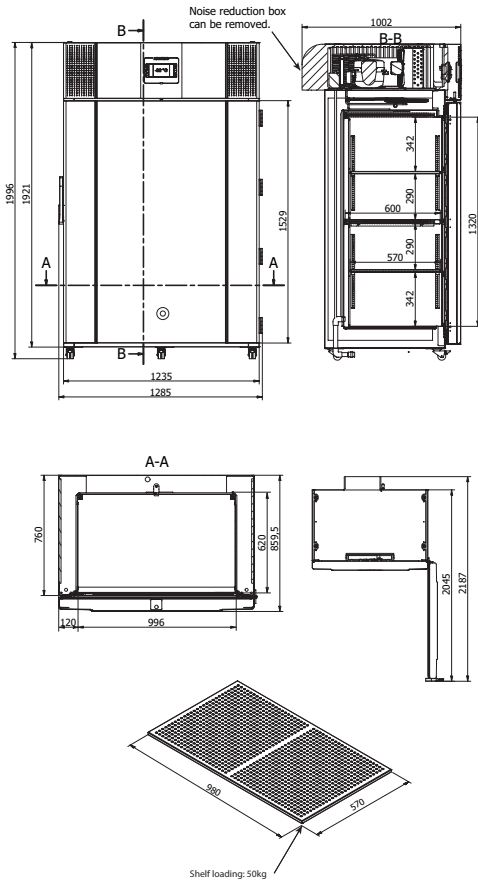
◄ **CASCADE** **VS** **ARCTIKO TRUE DUAL™ System**

With a Cascade system (marked black●) the temperature will rise gradually and the samples will be destroyed.

ARCTIKO's **TRUE DUAL™** cooling system (marked green●) will serve as a backup and the inside temperature will stay in the low temperatures

Maintains **-86°C**

Maintains **-70°C or lower**

Normal operation

Unexpected trouble on system **A** or **B**

■Hold over

■Pull-down

▲ **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.

Noise reduction box can be removed.

Shelf loading: 50kg

MODEL		ULUF P820GG
Main specifications	Item code	DAI 1850
	Temperature range (°C)	-40 / -86
	Max. ambient temperature (°C)	32
	Capacity (L)	819
	Exterior dimensions WxDxH (mm)	1285x859,5/1002*x1999
	Interior dimensions WxDxH (mm)	996x620x1320
	Weight (KG)	275
	Insulation (mm)	120
	Cooling technology	dual system / static
	Controller model / probe type	V700 / PT100
Power	Power supply (V)	230
	Frequency (Hz)	50/60
	Power consumption (kWh/24h)	17,3
	AMP (A)	10,3
	Power (Watt)	1550
	Horse power (HP)	2 x 3/4
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 alarm module)	yes
	Electronic data logger	yes
	RS 485 port	optional
	USB port for software update & data download	yes
	Temperature chart recorder	optional
Display features	Display type	7'' touch screen
	Number of optional reference probes	0 (1 reference probe included as standard)
	Password protection for turning unit on / off	yes
	Temperature graph on display	yes
Other features	Automatic defrost	no
	Vacuum release port	yes
	Access port for external probe etc. (int. diameter mm)	12
	Light	yes
	Lock with key	yes
	Castors (total pcs) / castors with brake (pcs)	5 / 2
	Fixed feet (pcs) / levelling feet (pcs)	no
	Sub lids / inner doors (pcs)	4
	Reversible door(s)	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	1 / 2
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	5 / 5
	Max. load per shelf (kg)	50
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	616
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	392
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	280
	Max. capacity of samples in Arctiko 10x10 boxes (pcs)	61.600
Refrigeration & cabinet	Number of compressors	2
	Refrigerant	GG20
	Interior cabinet material	stainless steel
	Exterior cabinet material	painted steel
	Colour (exterior cabinet)	white
	Foam type	polyurethane
	VIP vacuum insulated panels	yes
Shipping	Shipping weight (KG)	427
	Shipping dimensions WxDxH (cm)	141x127x225
	Shipping volume (m³)	4,03

ISO
ISO 9001:2015
Certificate No: 33037

ISO
ISO 13485:2016
Certificate No: 0000320341-PA-NA-NOR

CE

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* Depth of 1002 mm includes detachable airflow management and noise reduction system.
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