

true cooling specialists



### **ULTRA LOW TEMPERATURE I** 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.

NATURAL

REERIGERANT

# EXTREMELY POWERFUL AND EFFICIENT COOLING

This model is characterized by the short pull down time of approx. 3 hours' 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.

<sup>1</sup> See below graph under "Improved recovery time" Ambient temperature 32°C Freezer with no-load.

## ENVIRONMENTALLY FRIENDLY

Our natural refrigerants include extremely low ODP<sup>1</sup> and GWP<sup>2</sup> 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.

<sup>1</sup> Zero Ozone Depletion Potential <sup>2</sup> 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<sup>™</sup> 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.





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.



JLUF P820GG\*



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.

night. of your



DIRECT

COOLING

VACUUM INSULATED PANELS

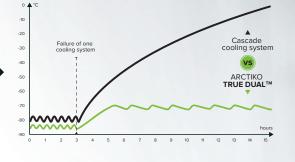
ONEGRIP™

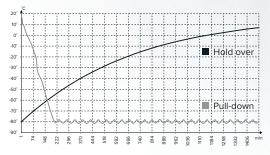
HANDLE

NOISE REDUCTION TECHNOLOGY

# ARCTIK CO ULUF P820GG true cooling specialists

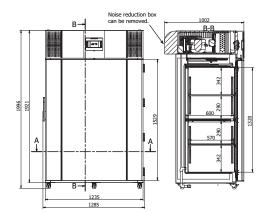
PERFORMANCE

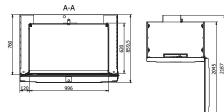


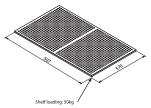


#### IMPROVED RECOVERY TIMES

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.









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### CASCADE **vs** ARCTIKO TRUE DUAL<sup>™</sup> System

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

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



	MODEL	ULUF P820GG
	Item code	DAI 1850
	Temperature range (°C)	-40 / -86
	Max. ambient temperature (°C)	32
ions	Capacity (L)	819
ficat	Exterior dimensions WxDxH (mm)	1285x859,5/1002*x1999
Main specifications	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 display as text - not codes	yes
Alarm functions	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
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes
Data logging & external connection	Electronic data logger	yes
	RS 485 port	optional
	USB port for software update & data download	yes
		,
	Temperature chart recorder	optional
	Temperature chart recorder Display type	optional 7" touch screen
ay 'es	Display type	7" touch screen
Display eatures	Display type Number of optional reference probes	7" touch screen 0 (1 reference probe included as standard)
Display features	Display type Number of optional reference probes Password protection for turning unit on / off	7" touch screen O (freference probe included as standard) yes
Display features	Display type Number of optional reference probes Password protection for turning unit on / off Temperature graph on display	7" touch screen 0 (1 reference probe included as standard)
Display features	Display type Number of optional reference probes Password protection for turning unit on / off Temperature graph on display Automatic defrost	7" touch screen 0 (1 reference probe included as standard) yes yes no
Display features	Display type Number of optional reference probes Password protection for turning unit on / off Temperature graph on display Automatic defrost Vacuum release port	7" touch screen 0 (treference probe included as standard) yes yes no yes
Display features	Display type Number of optional reference probes 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)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12
Display features	Display type Number of optional reference probes 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) Light	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes
Display features	Display type Number of optional reference probes 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) Light Lock with key	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes yes yes
	Display type Number of optional reference probes 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) Light Lock with key Castors (total pcs) / castors with brake (pcs)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes yes 5 / 2
	Display type Number of optional reference probes 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) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes yes 5 / 2 no
	Display type Number of optional reference probes 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) Light Lock with key Castors (total pcs) / castors with brake (pcs) Fixed feet (pcs) / levelling feet (pcs) Sub lids / inner doors (pcs)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes yes 5 / 2 no 4
	Display type Number of optional reference probes 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) 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)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes yes 5 / 2 no 4 no
Display features features	Display type Number of optional reference probes 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) 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)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes yes 5 / 2 no 4 no 1/2
	Display type Number of optional reference probes 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) 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)	7" touch screen 0 (treference probe included as standard) yes yes no yes 12 yes 5 / 2 no 4 no 1/2 5 / 5
	Display type Number of optional reference probes 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) 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)	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           5 / 2           no           4           no           1/2           5 / 5           50
	Display type Number of optional reference probes 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) 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)	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           yes           5 / 2           no           4           no           1/2           5 / 5           50           616
	Display type Number of optional reference probes 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) 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)	7" touch screen           0 (t reference probe included as standard)           yes           yes           12           yes           52           9           5/2           no           4           no           1/2           5/5           50           616           392
	Display type Number of optional reference probes 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) 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)	7" touch screen           0 (treference probe included as standard)           yes           yes           12           yes           12           yes           5 / 2           no           4           no           1/2           5 / 5           50           616           392           280
	Display type Number of optional reference probes 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) 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) Max. capacity of 96 mm boxes 9x9 didviders (pcs)	7" touch screen           0 (treference probe included as standard)           yes           yes           12           yes           52           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600
Other features	Display type Number of optional reference probes 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) 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) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors	7" touch screen           0 (treference probe included as standard)           yes           yes           12           yes           12           yes           5 / 2           no           4           no           1/2           5 / 5           50           616           392           280           61.600           2
Other features	Display type Number of optional reference probes 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) 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) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant	7" touch screen           0 (treference probe included as standard)           yes           yes           12           yes           52           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20
Other features	Display type Number of optional reference probes Password protection for turning unit on / off Temperature graph on display Automatic defrost 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) / 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) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material	7" touch screen           0 (treference probe included as standard)           yes           yes           12           yes           5 / 2           no           4           no           1/2           5 / 5           50           616           392           280           61.600           2           GG20           stainless steel
Other features	Display type Number of optional reference probes Password protection for turning unit on / off Temperature graph on display Automatic defrost 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) / 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) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20           stainless steel           painted steel
Other features	Display type Number of optional reference probes Password protection for turning unit on / off Temperature graph on display Automatic defrost 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) / 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)	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20           stainless steel           painted steel           white
	Display type Number of optional reference probes 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) 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) 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	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20           stainless steel           painted steel           white           polyurethane
Rerigeration & cabinet	Display type Number of optional reference probes 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) 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 50 mm boxes 9x9 didviders (pcs) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20           stainless steel           painted steel           white           polyurethane           yes
Rerigeration & cabinet	Display type Number of optional reference probes 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) 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. no. of shelves (pcs) / recommended max. no. of shelves (pcs) Total capacity of 50 mm boxes 9x9 didviders (pcs) Total capacity of 50 mm boxes 9x9 didviders (pcs) Max. capacity of samples in Arctiko 10x10 boxes (pcs) Number of compressors Refrigerant Interior cabinet material Exterior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels Shipping weight (KG)	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20           stainless steel           painted steel           white           polyurethane           yes           427
Other features	Display type Number of optional reference probes 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) 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 50 mm boxes 9x9 didviders (pcs) Max. capacity of 96 mm boxes 9x9 didviders (pcs) Number of compressors Refrigerant Interior cabinet material Colour (exterior cabinet) Foam type VIP vacuum insulated panels	7" touch screen           0 (treference probe included as standard)           yes           yes           no           yes           12           yes           yes           5/2           no           4           no           1/2           5/5           50           616           392           280           61.600           2           GG20           stainless steel           painted steel           white           polyurethane           yes

\* Depth of 1002 mm includes detachable airflow management and noise reduction system. Actual performance of products may vary upon various factors. All rights to this temperature mapping belong to Arctiko A/S. The drawing may not be copied nor presented to any other person without prior written consent of Arctiko A/S.

CERTIFICATES