

Ultra-low freezers

Application

- biotechnology
- research
- pharmacy
- storage



Ultra low freezers are used for deep freezing of biotechnological samples and other materials which should be stored at low temperature.

Calibration



All thermostatic equipment manufactured by POL-EKO-APARATURA can be provided with Calibration Certificate issued by accredited Measurement Laboratory. Detailed information on accreditation of POL-EKO Laboratorium Pomiarowe is available on website: www.polekolab.pl.

Controller advantages

- graphic LCD display with illuminated buttons
- temperature control
- operating with temperature priority mode
- adjustable start delay feature (1 min...99:59 h)
- adjustable hold at set point time for temperature from 1 min to 999:59 h or continuous operating
- overview of set and current parameters while operating
- recording of min, average and max temperature value for each segment
- audible and visual temperature alarm
- temperature sensor fail alarm
- real-time clock
- digital timer
- auto-diagnostic function
- internal memory to store up to 2046 data records
- power failure control system (program continued after restoring power)
- controller spare batteries in case of power failure- alarm output
- additional port for installation of CO₂ & Pt100 backup

ZLN-UT 200 *coming soon*



ZLN-UT 300



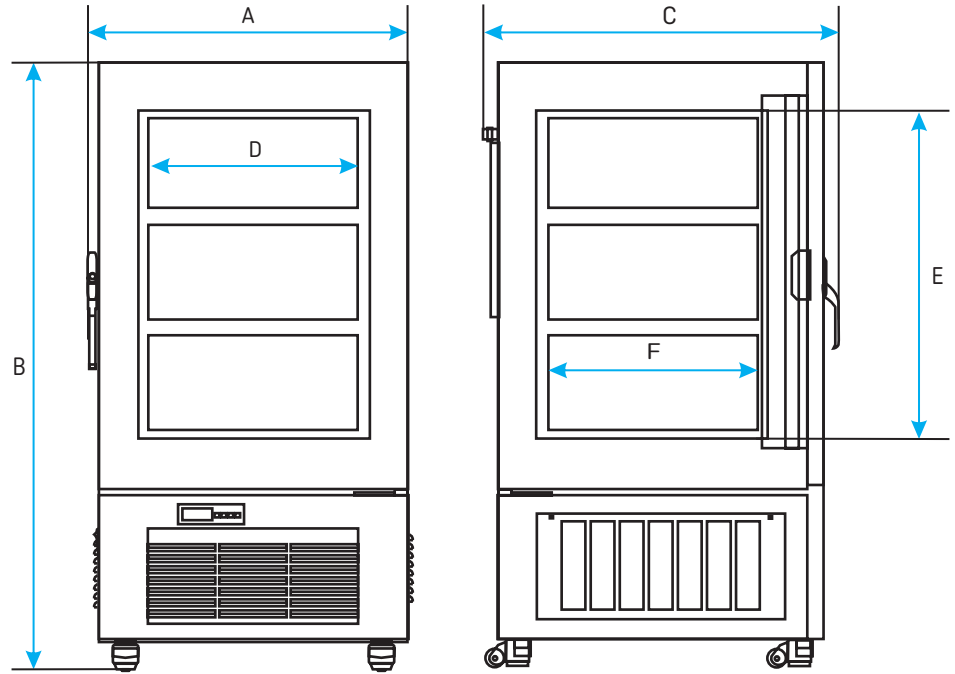
Parameter		ZLN-UT 200	ZLN-UT 300
air convection		natural	
chamber capacity [l]		237	326
number of boxes 133x133x50 mm [pcs]		108	144
door type		double, solid	
temperature range [°C]		-86 ... -40	
temperature resolution [°C]		every 0,1	
cooling time from +20 °C to -80 °C [h]		3,5	3,5
heating time in case of power failure -80 °C to -60 °C [h]		1,5	1,5
controller		microprocessor with external LCD graphic display	
interior	COMF	stainless steel to DIN 1.4016	
	PREM	acid-proof stainless steel to DIN 1.4301	
housing		powder coated sheet	
overall dims [mm]	A width	850	850
	B height	1620	1910
	C depth	950	950
internal dims [mm]	D width	520	520
	E height	830	1140
	F depth	550	550
max unit workload [kg]		65	80
max shelf workload [kg]		10	10
nominal power [W]		670	670
energy consumption 24h [kWh] at -80°C		16	18
weight [kg]		180	200
voltage		230 V 50 Hz	
number of internal chambers		3	4
internal chamber dims [mm]	width	520	520
	height	240	240
	depth	550	550
warranty		24 months	
manufacturer		POL-EKO-APARATURA	

all the above technical data refer to standard units (without optional accessories)

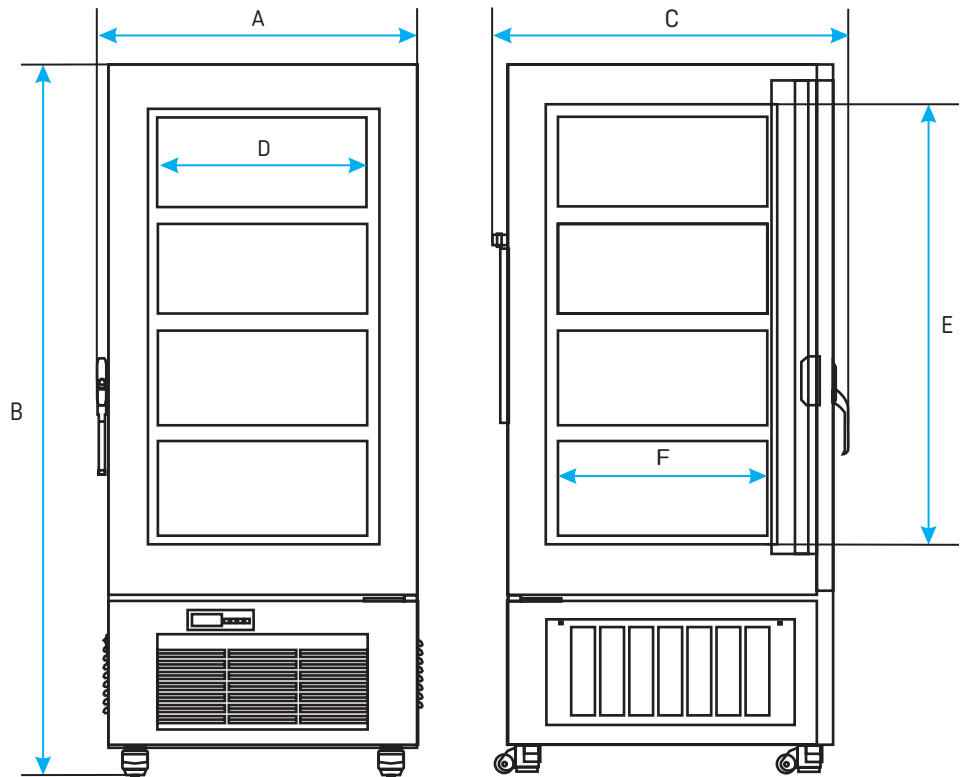
All data on temperature stability and uniformity available on www.pol-eko.eu.



ZLN-UT 200



ZLN-UT 300



Ultra-low freezers

▲ Racks with drawers and boxes for test-tubes for ultra-low freezers



Racks with drawers
 sturdy and heavy duty,
 made of stainless steel;
 feature quick and easy
 access to all boxes;
 4 drawers (each for 3 boxes)
 per rack.



Boxes
 made of polypropylene,
 dimensions 133 x 133 x 50 mm;
 each box suits 81 test-tubes
 of Ø12,5 mm

▲ Boxes for test-tubes

Model	compartments	racks per compartment	boxes per rack	boxes per compartment	boxes per unit	test-tubes per unit
ZLN-UT 200	3	3	12	36	108	8 748
ZLN-UT 300	4	3	12	36	144	11 664



Made in Poland. Established 1990.

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POL-EKO-APARATURA

*manufacturer of controlled environment
equipment for laboratory analysis
and technological processes,
distributor in Poland of:
HAMILON, KNICK,
THERMO SCIENTIFIC, WTW.*

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In spite of taking necessary steps to avoid mistakes, we cannot guarantee that the technical data in this catalogue is completely correct. POL-EKO-APARATURA company reserves the right to change some of the technical parameters. All dimensions are given exact to $\pm 5\%$.