

04

HEATING EQUIPMENT



Laboratory incubators CL
Drying ovens SL
Drying ovens with nitrogen blow SLWN
SIMPLE drying ovens
Laboratory sterilizers SR
Pass-through sterilizers SRWP
Warming chambers CALDERA



LABORATORY INCUBATORS

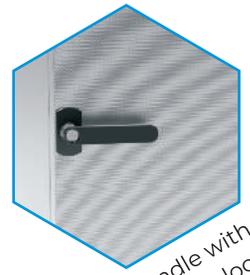
are perfect for incubation of samples at temperatures above ambient up to +100°C



SMART/SMART PRO controller with USB port



access port (Ø30 mm)

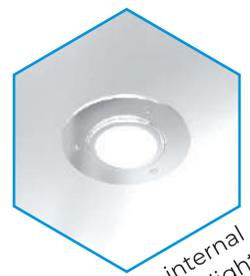


handle with door lock

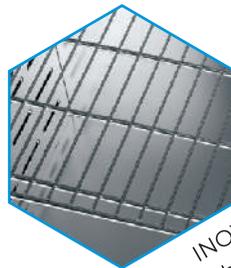
Laboratory incubator CLN 180 IG SMART PRO



internal glass door



internal LED light (option)



INOX wire shelf



All thermostatic equipment manufactured by POL-EKO® can be provided with Calibration Certificate issued by accredited Measurement Laboratory. Detailed information on accreditation is available on website: www.polekolab.pl and on page 161.



MAIN STANDARD BENEFITS

- temperature range: 5°C above ambient temperature...+100°C
- quality control protocol (at +37°C)
- English instruction manual
- temperature protection class 2.0 to DIN 12880
- open door alarm
- fan speed control (CLW)
- castors for CL 400, 750, 1000
- air-flap control in range 0...100%
- LAN and USB ports
- height adjustable feet
- access port: Ø30 mm for models 53-1000 or Ø9 mm for models 15, 32 with silicone plug on the left wall
- door lock
- stainless steel wire shelves (INOX)
- double door (external solid, internal glass)
- main power switch flush with housing prevents unintentional switch off

EXTRA FOR SMART PRO

- Wi-Fi
- LAN cable
- LabDesk
- temperature protection 3.1 to DIN 12880

AVAILABLE VERSIONS

- SMART
- SMART PRO (not available for CL 15/32)
- reinforced

SOFTWARE

- LabDesk for data download to a PC via LAN or Wi-Fi (optional for SMART version)
- LabDesk Cloud platform for remote data monitoring



TECHNICAL DATA


parameters	CL 15	CL 32	CL 53	CL 115	CL 180	CL 240	CL 400	CL 750	CL 1000		
air convection	natural (CLN) / forced (CLW)						forced (CLW)				
fan speed control [%]	0..100 (CLW)					10..100 (CLW)					
chamber capacity [l]	15	32	56	112	180	245	424	749	1005		
door type	double ¹		double ¹ / door with viewing window (option)								
temperature range	+5°C above ambient temperature ...+100°C										
temperature resolution [°C]	every 0,1										
controller	microprocessor PID, 4,3" (Smart) / 7" (SMART PRO) full-colour touch screen										
interior	acid-proof stainless steel to DIN 1.4301										
housing	-	powder coated sheet									
	IG	stainless steel linen finish to DIN 1.4301									
max shelf workload ⁴ [kg]	-	10	10	25	25	25	25	25	-	-	
	PW ² version	-	-	50	50	50	100	100	100	100	
max unit workload [kg]	-	20	30	40	60	75	90	120	140	-	
	W ³ version	-	-	80	120	120	300	300	300	300	
nominal power [W]	350	350	450	450	650	850	1300	1900	1900		
weight [kg]	32	36,5	50	68	92	119	170	266	319		
castors	no			option				yes			
temperature fluctuation ⁵ at +37°C [±/°C]	CLN	0,2	0,2	0,2	0,2	0,2	0,3	-	-	-	
	CLW	0,2	0,2	0,1	0,1	0,1	0,1	0,1	0,1	0,2	
temperature variation ⁵ at +37°C [±/°C]	CLN	0,7	0,7	0,7	0,8	0,8	0,8	-	-	-	
	CLW	0,4	0,4	0,3	0,3	0,3	0,3	0,5	0,5	1,0	
over temperature protection	class 2.0 to DIN 12880 / class 3.1 (option) / class 3.1 in SMART PRO										
power supply	230V 50-60Hz / 115V 50-60Hz							230V 50-60Hz/ 3P + PE 230V 50-60Hz			
shelves fitted/max	1/2	1/3	3/9	2/7	3/9	3/10	3/14	5/16	6/22		
warranty	24 months										
manufacturer	POL-EKO®										

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

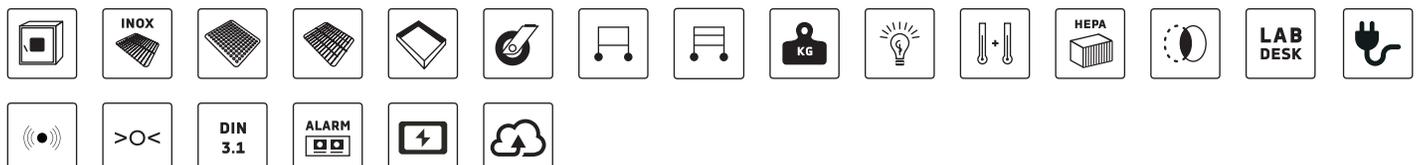
1 - internal glass, external solid

2 - reinforced shelf

3 - reinforced version

4 - on uniformly loaded surface

5 - fluctuation measured in centre of chamber; in space, variation (K) calculated for chamber as: $K = \pm (T_{avg\ max} - T_{avg\ min}) / 2$

OPTIONS & ACCESSORIES (icon description see pages 117-124)


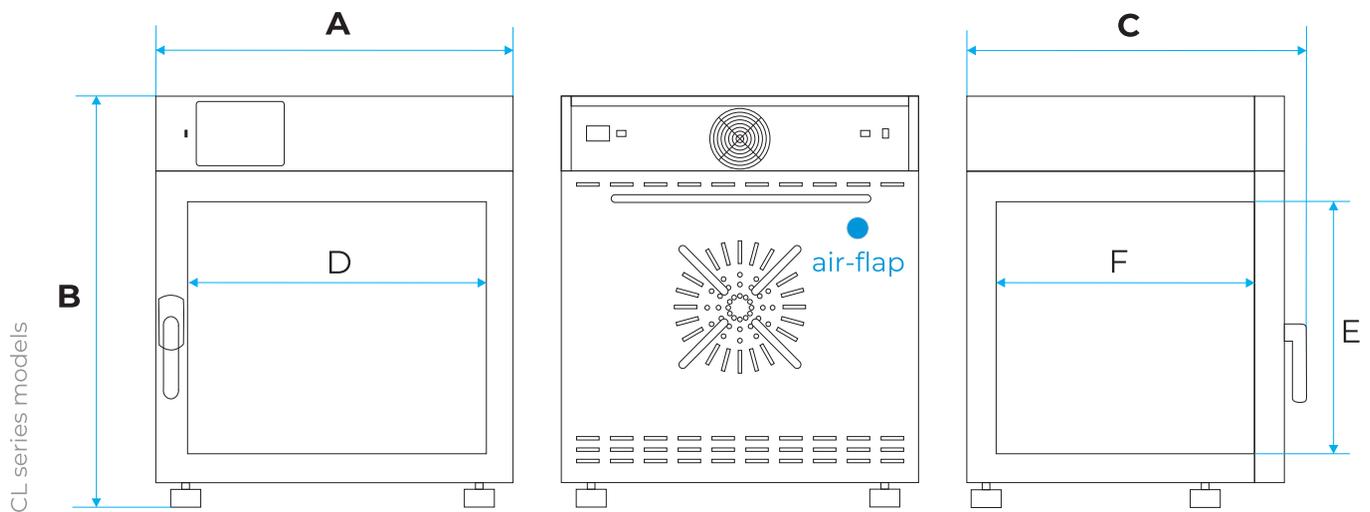
DIMENSIONS & DATA

All dimensions refer to standard units (without optional accessories).

Overall depth doesn't include 50 mm of power cable, the width does not include the 20 mm of access port's silicone plug.

Possibility of changing the shelf position:

- CL 15 - every 50 mm
- CL 32 - every 60 mm
- CL 53/115/180/240/400/750/1000 - every 70 mm



		CL 15	CL 32	CL 53	CL 115	CL 180	CL 240	CL 400	CL 750	CL 1000	
overall dims [mm]	A width	520	600	600	650	660	820	1020	1260	1260	
	B height	560	640	710	850	1040	1140	1440	1600	2000	
	C depth	470	520	620	710	820	770	770	880	880	
internal dims [mm]	D width	320	400	400	460	460	600	800	1040	1040	
	E height	230	320	390	530	720	800	1040	1200	1610	
	F depth	200	250	350	440	550	500	500	600	600	
air-flap ext. diameter [mm]		40					60				