Cooled incubators (ST) can provide stable temperature between +3...+70°C regardless of ambient conditions

USB port

temperature sensor

access port (Ø30 mm)

solid door,
glass (option),
double (option)

door lock

internal LED light

fan

wire shelf

Cooled incubator ST 2 C Smart PRO

All thermostatic equipment manufactured by POL-EKO-APARATURA can be provided with Calibration Certificate issued by accredited Measurement Laboratory. Detailed information on accreditation is available on website: www.pol-eko.eu.

27.7°C

The wide range of our products requires specialisation in many fields. The production of each part involves complex sequence of technological processes, but modern machinery park comes to our aid. To achieve repeatability and highest quality of our components, most of the work is ensured by CNC machines and robots. We put our passion, heart and experience in every detail.

Łuksza Sosna, Head of Mechanical Processing Department

STANDARD FEATURES

- temperature range +3...+40°C (+70°C for Smart PRO)
- quality control protocol (at +37°C)
- English instruction manual
- temperature protection class 1.0 to DIN 12880 for B (basic) and C (comfort) versions, 2.0 for P (premium) version and 3.3 for Smart PRO
- open door alarm
- castors in standard for models ST 1200 and 1450
- LAN and USB ports
- internal LED light
- access port (Ø30 mm) on the left wall
- door lock
- wire shelves in B (basic) models, stainless steel wire shelves (INOX) in C (comfort) and P (premium) models
- solid door
- anchoring kit for ST 500, 700, 1200, 1450 and double/triple chambers

EXTRA FOR **SMART PRO**

- Wi-Fi
- LAN cable
- LabDesk

AVAILABLE VERSIONS

- Smart
- Smart PRO
- FOT photoperiod (see page 44)
- FIT phytotron (see page 45)
- TR tropic (on request) for higher ambient temperatures
- double/triple chamber
- combined with ZLN 85 or CHL

SOFTWARE

- LabDesk for data download to a PC via LAN or Wi-Fi (optional for Smart version)

Application

- BOD determination
- microbiological research
- plant growing and microorganisms breeding at specified temperature
- storage of liquids and samples for physicochemical analysis

		ST 1	ST 2	ST 3	ST 4	ST 5	ST 6	ST 500	ST 700	ST 1200	ST 1450
Parameter											
air convection		forced									
chamber capacity [l]		70	150	200	250	300	400	500	625	1365	1540
working capacity [l]		55	122	163	203	243	324	469	611	1355	1525
door type		solid / glass or double[1] (option)									
temperature range [°C]		+3...+40 / up to +70 (option) / +3...+70 in Smart PRO									
temperature resolution [°C]		every 0,1									
controller		microprocessor PID, 4,3" (Smart) / 7" (Smart PRO) full colour touch screen									
interior	B (basic)	aluminum									
	C (comfort)	stainless steel to DIN 1.4016									
	CS (comfort/S)	stainless steel to DIN 1.4016									
	P (premium)	acid-proof stainless steel to DIN 1.4301									
	PS (premium/S)	acid-proof stainless steel to DIN 1.4301									
housing	B (basic)	powder coated sheet									
	C (comfort)	powder coated sheet									
	CS (comfort/S)	polished stainless steel									
	P (premium)	powder coated sheet									
	PS (premium/S)	polished stainless steel									
overall dims [mm]	A width	570	620	620	620	620	620	660	750	1480	1460
	B height	660	900	1100	1300	1500	1900	1990	1990	1990	1940
	C depth	680	650	650	650	650	650	810	890	890	990
internal dims[3] [mm]	D width	430	480	480	480	480	480	480	540	1270	1270
	D' width	470	520	520	520	520	520	510	600	1330	1340
	E height	430	660	860	1060	1260	1660	1510	1510	1510	1460
	F depth	300	420	420	420	420	420	610	680	680	780
	F' depth	360	480	480	480	480	480	-	-	-	-
	G depth	-	320	320	320	320	320	-	-	-	-
	H height	-	440	640	840	1040	1440	-	-	-	-
	I height	-	-	-	-	-	-	1380	1380	1380	1380
max shelf workload[4] [kg]	-	10	10	10	10	10	10	20	30	30	30
	PW[5] version	on request						100	100	100	100
max unit workload [kg]	-	20	30	40	50	60	60	100	150	300	300
	W[6] version	on request									
nominal power [W]		250	250	250	250	350	350	650	650	650	950
weight[7] [kg]		37	54	61	69	75	90	105	121	185	200
temperature fluctuation* at +37°C [+/- °C]		0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
temperature variation* at +37°C [+/- °C]		0,5	0,5	0,5	0,6	0,6	0,6	1,0	1,0	1,0	1,0
temperature protection		class 1.0 to DIN 12880 / class 3.3 (option) / class 2.0 in P version / class 3.3 in Smart PRO									
power supply**		230V 50-60Hz									
shelves fitted/max		2/2	3/4	3/4	4/6	4/7	4/10	3/11	3/11	2 x 3/11[8]	2 x 3/11[8]
refrigerant		R1234ze / GWP=1						R290 / GWP=3			
warranty		24 months									
manufacturer		POL-EKO-APARATURA									

all the above technical data refer to standard units (without optional accessories)
* - fluctuation measured in centre of chamber; in space, variation (K) calculated for chamber as: K= +/- (T avg max - T avg min) / 2
** - other power supplies on request
1- additional internal glass door
2- depth does not include 50 mm of power cable
3- dims of units with double door are smaller
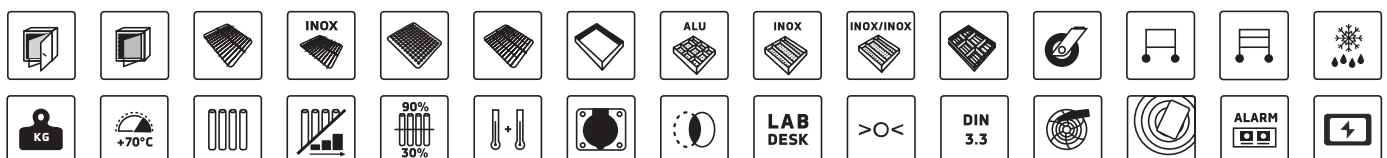4- on uniformly loaded surface

5- reinforced shelf
6- reinforced version
7- for equipment with solid door, in version B (basic)
8- two columns with 3 shelves each

Options and accessories (icon description see pages 76-82)

		ST 1/1	ST 1/1/1	ST 2/2	ST 2/3
Parameter					
air convection		forced			
chamber capacity [l]		70 / 70	70 / 70 / 70	150 / 150	150 / 200
working capacity [l]		55 / 55	55 / 55 / 55	122 / 122	122 / 163
door type		solid / glass or double[1] (option)			
temperature range [°C]		+3...+40 / up to +70 (option) / +3...+70 in Smart PRO			
temperature resolution [°C]		every 0,1			
controller		microprocessor PID, 4,3" (Smart) / 7" (Smart PRO) full colour touch screen			
interior	B (basic)	aluminum			
	C (comfort)	stainless steel to DIN 1.4016			
	CS (comfort/S)	stainless steel to DIN 1.4016			
	P (premium)	acid-proof stainless steel to DIN 1.4301			
	PS (premium/S)	acid-proof stainless steel to DIN 1.4301			
housing	B (basic)	powder coated sheet			
	C (comfort)	powder coated sheet			
	CS (comfort/S)	polished stainless steel			
	P (premium)	powder coated sheet			
	PS (premium/S)	polished stainless steel			
overall dims[2] [mm]	A width	570	570	620	620
	B height	1290	1920	1720	1930
	C depth	680	680	650	650
internal dims[3] [mm]	D width	430	430	480	480
	D' width	470	470	520	520
	E height	430	430	660	660 / 860
	F depth	300	300	420	420
	F' depth	360	360	480	480
	G depth	-	-	320	320
	H height	-	-	440	440 / 640
max shelf workload[4] [kg]	-	10	10	10	10
	PW[5] version	on request			
max unit workload [kg]	-	20 / 20	20 / 20 / 20	30 / 30	30 / 40
	W[6] version	on request			
nominal power [W]		500	750	500	500
weight[7] [kg]		65	98	109	114
temperature fluctuation* at +37°C [+/- °C]		0,3	0,3	0,3	0,3
temperature variation* at +37°C [+/- °C]		0,5	0,5	0,5	0,5
temperature protection		class 1.0 to DIN 12880 / class 3.3 (option) / class 2.0 in P version / class 3.3 in Smart PRO			
power supply**		230V 50-60Hz			
shelves fitted/max		see page 36			
refrigerant		R1234ze / GWP=1			
warranty		24 months			
manufacturer		POL-EKO-APARATURA			

all the above technical data refer to standard units (without optional accessories)
* - fluctuation measured in centre of chamber; in space, variation (K) calculated for chamber as: K= +/- (T avg max - T avg min) / 2
** - other power supplies on request
1- additional internal glass door
2- depth does not include 50 mm of power cable
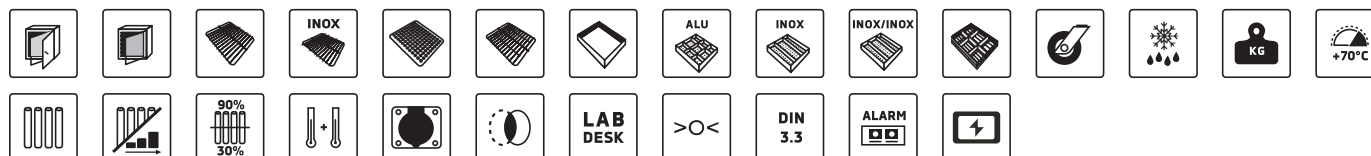3- dims of units with double door are smaller
4- on uniformly loaded surface
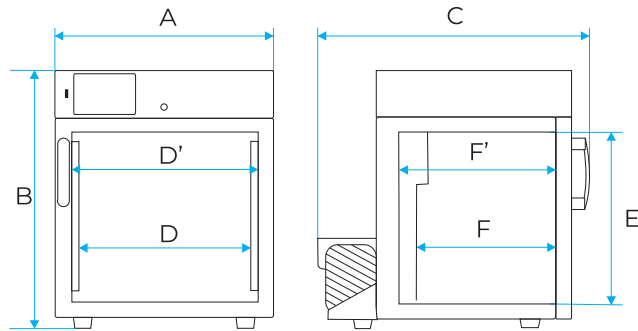
5- reinforced shelf
6- reinforced version
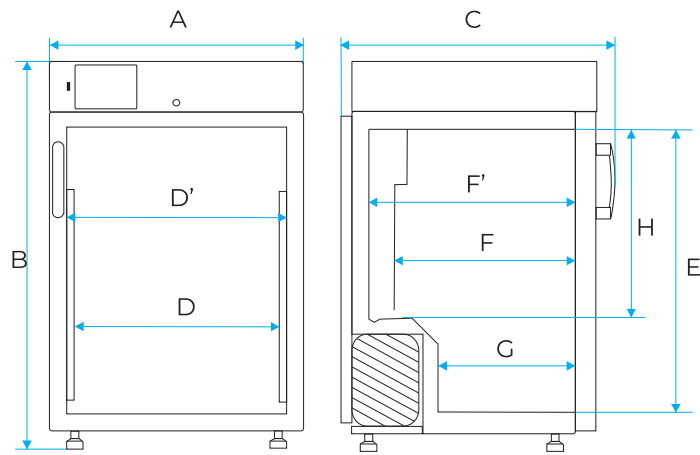7- for units with solid door, in version B (basic)

Options and accessories (icon description see pages 76-82)

Dimensions ST 1

Dimensions ST 2/3/4/5/6

Dimensions ST 500/700/1200/1450