



**POL-EKO**  
Perfect Environment

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## Data sheet

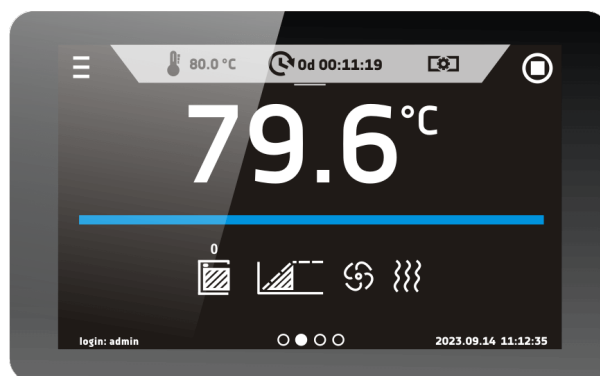
## Laboratory Incubator CLN 180 Smart PRO



The photo above is for reference only, may show additional options not included in standard equipment. The real appearance, particularly color and structure of the material may differ from the ones presented in the photo.

### Advantages of the SMART PRO controller:

- large (7"), clear, full colour touch screen
- LAN, USB ports and WiFi for communication and data transfer
- multi-segment time and temperature programs
- overview of data in tabular and graphic form
- visual and sound alarm
- Admin function for management
- password protected log-in
- internal memory for programs and data storage
- event registry with user notifications
- LabDesk software and user manual for direct download



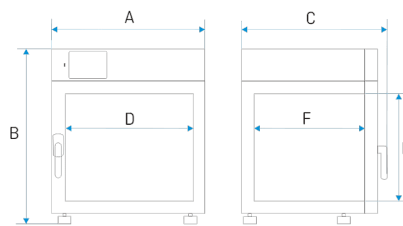
**Smart PRO** - preview screen



1	133
type	CLN 180 Smart PRO
<b>TECHNICAL DATA</b>	
air convection	natural
chamber capacity [l]	180
working capacity [l]	180
controller	microprocessor PID
display	7" full colour touch screen
<b>TEMPERATURE</b>	
temperature range [°C]	5°C above ambient temperature ... +100°C
temperature resolution every ... [°C]	0,1
temperature fluctuation at 37°C [±/°C]*	0,2
temperature variation at 37°C [±/°C]*	0,8
temperature protection	class 3.1 to DIN 12880
<b>CHAMBER</b>	
door type	double(5) / door with viewing window (option)
<b>interior</b>	
Smart PRO	acid-proof stainless steel to DIN 1.4301
IG Smart PRO	acid-proof stainless steel to DIN 1.4301
<b>housing</b>	
Smart PRO	powder coated sheet
IG Smart PRO	stainless steel linen finish

**overall dims [mm] /1/**

width A	660
height B	1040
depth C	820
<b>internal dims [mm]</b>	
width D	470
height E	720
depth F	560



shelves (standard   max)	3   9
max shelf workload [kg] /2/	25
- reinforced shelf version (PW) [kg] /3/	50
max unit workload [kg]	75
- reinforced unit version (W) [kg] /4/	120
weight [kg]	92



## ELECTRICAL PARAMETERS

voltage**	230V 50-60Hz
nominal power [W]	650
warranty	24 months
manufacturer	POL-EKO
txt_opis_pt	<p>all the above technical data refer to standard units (without optional accessories)</p> <p>* - fluctuation measured in centre of the chamber; in space, variation (K) calculated for chamber as: <math>K = \pm (T \text{ average max.} - T \text{ average min.}) / 2</math></p> <p>** - other power supplies on request</p> <p>1 - depth doesn't include 50 mm of power cable, the width does not include the 20 mm of rubber plug</p> <p>2 - on uniformly loaded surface</p> <p>3 - reinforced shelf</p> <p>4 - additional internal glass door</p>
PL typ urządzenia	Laboratory Incubator
img_photo	CLN-180-Smart-PRO
<p>The photo above is for reference only, may show additional options not included in standard equipment. The real appearance, particularly color and structure of the material may differ from the ones presented in the photo.</p>	
nazwa www pl	Cieplarka Laboratoryjna CLN 180 Smart PRO
nazwa www EN	Laboratory Incubator CLN 180 Smart PRO
nazwa www ES	Incubadora de Laboratorio CLN 180 Smart PRO
ekran_grafika	cl_smart_pro
	cieplarki laboratoryjne
0	1

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

\* - fluctuation measured in centre of the chamber; in space, variation (K) calculated for chamber as:  
 $K = \pm (T \text{ average max.} - T \text{ average min.}) / 2$

\*\* - other power supplies on request

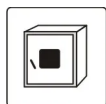
1 - depth doesn't include 50 mm of power cable, the width does not include the 20 mm of rubber plug

2 - on uniformly loaded surface

3 - reinforced shelf

4 - additional internal glass door

## OPTIONS AND ACCESSORIES



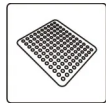
Order number: \*/A

door with viewing window



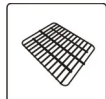
Order number: \*/P INOX

Stainless steel wire shelf INOX



Order number: \*/PP

Perforated shelf



Order number: \*/PW

Reinforced shelf



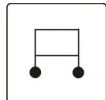
Order number: KUW GN\*/\*

Stainless steel cuvettes



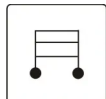
Order number: QLK\*

Castors



Order number: \*/S or \*/S INOX

Table with castors



Order number: \*/ST or \*/S INOX

Base on castors



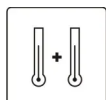
Order number: \*/W

Reinforced version



Order number: OWW/OWW LED

Interior lighting



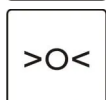
Order number: PT 100

Additional temperature sensor



Order number: HEPA

HEPA Clean Air Filter



Order number: BRT\*/L or IQ/OQ/PQ

Calibration and IQ, OQ, PQ qualification



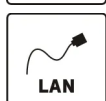
Order number: BPP 12

Battery backup for display



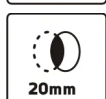
Order number: PORT ALARM

Dry alarm contact



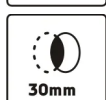
Order number: LANK

LAN cable



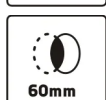
Order number: OCZ/20

Non-standard access port 20 mm



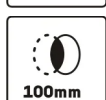
Order number: OCZ/30

Additional access port 30 mm



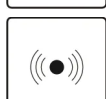
Order number: OCZ/60

Non-standard access port 60 mm



Order number: OCZ/100

Non-standard access port 100 mm



Order number: KD

Access control