



**POL-EKO**  
Perfect Environment

(+48) 32 453 91 70  
info@pol-eko.com.pl  
www.pol-eko.com.pl

**POL-EKO A. Polok-Kowalska sp.k.**  
44-300 Wodzisław Śląski  
ul. Kokoszycka 172 C

## Data sheet

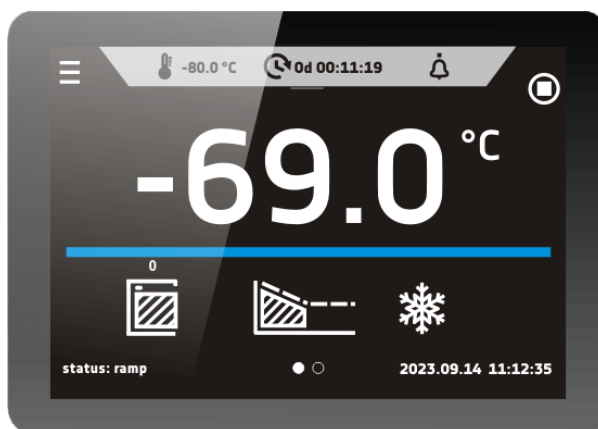
## Ultra-Low Freezer ZLN-UT 200 VIP Smart



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 controller:

- 4,3", clear, full colour touch screen
- LAN, USB ports for data transfer
- multi-segment time and temperature programs
- visual and sound alarm
- internal memory for programs and data storage
- event registry
- user manual for direct download
- Quick change of program parameters
- Alarm Bar
- operating with gloves on



Smart - preview screen



## TECHNICAL DATA

|                                             |                               |
|---------------------------------------------|-------------------------------|
| air convection                              | natural                       |
| chamber capacity [l]                        | 259                           |
| number of boxes 133x133x50mm (option) [pcs] | 192                           |
| controller                                  | microprocessor PID            |
| display                                     | 4,3" full colour touch screen |
| insulation type                             | vacuum - VIP panels           |

## TEMPERATURE

|                                                            |           |
|------------------------------------------------------------|-----------|
| temperature range [°C]                                     | -86...-50 |
| temperature resolution every ... [°C]                      | 0,1       |
| cooling time from +20°C to -80°C [min]                     | 160       |
| heating time in case of power failure -80°C to -60°C [min] | 50        |
| temperature fluctuation at -80°C [±/°C]*                   | 1,5       |
| temperature variation at -80°C [±/°C]*                     | 4,0       |

## CHAMBER

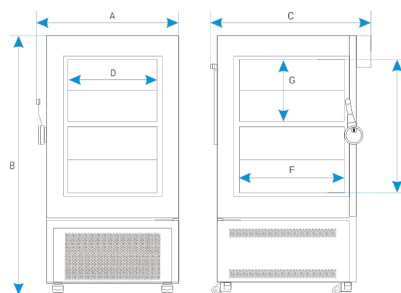
|                 |                                          |
|-----------------|------------------------------------------|
| door type       | solid                                    |
| <b>interior</b> |                                          |
| C Smart         | stainless steel to DIN 1.4016            |
| P Smart         | acid-proof stainless steel to DIN 1.4301 |
| <b>housing</b>  |                                          |
| C Smart         | powder coated sheet                      |
| P Smart         | powder coated sheet                      |

### overall dims [mm] /1/

|          |      |
|----------|------|
| width A  | 880  |
| height B | 1390 |
| depth C  | 960  |

### internal dims [mm]

|          |     |
|----------|-----|
| width D  | 620 |
| height E | 770 |
| depth F  | 580 |
| height G | 360 |



|                             |     |
|-----------------------------|-----|
| shelves (standard   max)    | 2/2 |
| max shelf workload [kg] /2/ | 10  |
| number of internal chambers | 2   |
| max unit workload [kg]      | 65  |
| weight [kg]                 | 200 |



## ELECTRICAL PARAMETERS

|                   |                             |
|-------------------|-----------------------------|
| voltage**         | 230V 50-60Hz                |
| nominal power [W] | 2100                        |
| refrigerant       | R290 / GWP=3   R170 / GWP=6 |
| warranty          | 24 months                   |
| manufacturer      | POL-EKO                     |

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

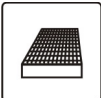
\* - fluctuation measured in centre of the chamber; in space, variation (K) calculated for chamber as:

$K = \pm (T_{\text{average max.}} - T_{\text{average min.}}) / 2$

\*\* - 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

## OPTIONS AND ACCESSORIES

|                                                                                     |                                 |                                |
|-------------------------------------------------------------------------------------|---------------------------------|--------------------------------|
|    | Order number: LabDesk           | LabDesk software               |
|   | Order number: PORT ALARM        | Dry alarm contact              |
|  | Order number: LANK              | LAN cable                      |
|  | Order number: KD                | Access control                 |
|  | Order number: ZLN-UT/CO2        | CO <sub>2</sub> back up system |
|  | Order number: ZLN-UT/STP12 / 16 | Boxes for samples              |
|  | Order number: ZLN-UT/ST12 / 16  | Rack with drawers              |