Freeze Dryer

LIOSMART-100

- Industrial scale freeze-drying
- 7.4 m^2 shelf area
- Shelf fluid circulated cooling and heating
- - 55 °C condenser coil temperature
- 50 recipes, each with up to 50 segments
- Water-cooled compressor refrigeration system
- VHP decontamination ready

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Device Specifications:

- Perfected temperature control on shelves
- Smooth and easy to clean
- Simple shelf removal for cleaning
- Shelves and chamber made of AISI 304
- Exterior made in AISI 304
- Fully transparent door for product and process observation
- Vacuum control function
- VHP decontamination ready

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Technical Data:	LIOSMART-100
External dimensions (WxDxH)	**1400 mm x 2178 mm x 1920 mm**
Chamber dimensions (WxDxH)	**700 mm x 1400 mm x 1000 mm**
Ice condenser performance	**100 kg**
Ice condenser temperature	**- 55 °C**
Ice condenser defrost	**Reverse ref. loop**
Number of shelves	**10**
Shelf size (WxD)	**600 mm x 1240 mm**
Shelf surface	**10 x 0.74 m^2 = 7.4 m^2**
Shelf spacing	**50 mm**
Shelve removal trolley	**Included**
Shelf temperature range	**- 40 °C … + 70 °C**
Shelf temperature stability	**+/- 0.3 °C**
Shelf temperature uniformity	**+/- 1 °C**
Temperature set resolution	**0.1 °C**
Shelf cool down rate	**From + 20 °C to - 40 °C … 60 min**
Heat up rate	**From - 40 °C to + 70 °C … 56 min**
Cooling	**Water cooled compressor system**
Heating	**Electrical**
User interface	**Fully programmable 50 recipes each with up to 50 process steps**
Software	**Windows compatible** **History & full remote control via virtual user interface**
Door	**Fully transparent single handed closing**
Power supply	**3 x 400V / 50 Hz / 57A**
Wattage (W)	**24000**
Interface	**RS 232 / USB**
Temperature probe	**PT-100 shelf temperature** **PT-100 condenser temperature** **PT-100 Material**
Vacuum probe	**Pirani chamber** **Pirani vacuum pump (optional)**
Weight	**~ 1600 kg**

*** Vacuum pump available separately!**

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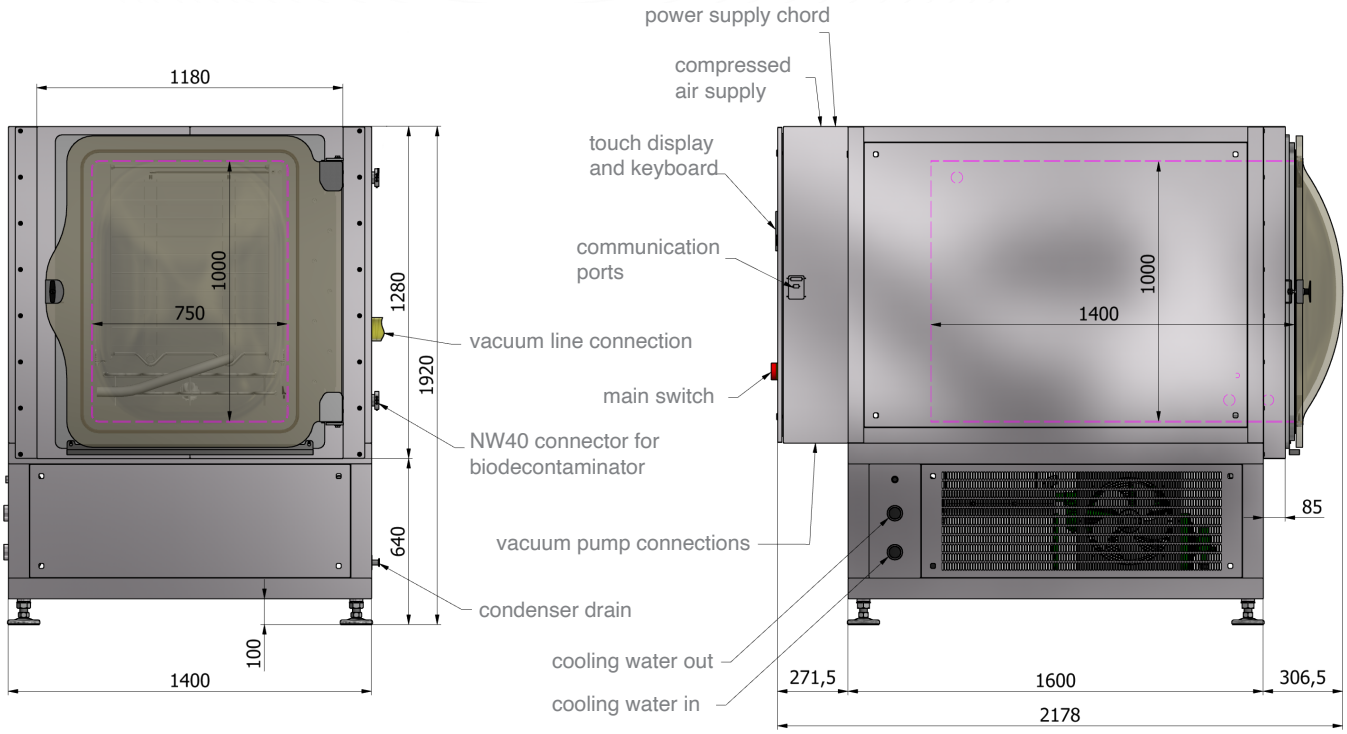
User Interface:

Dimensions:



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