

Freeze Dryer

LIOSMART 8/5P 0.1 or 0.2



New tool for pilot or R&D freeze-drying

- 0,1 to 0,2m² shelf area
- Shelf fluid circulated cooling and heating
- -55° (-90°)C condenser coil temperature
- Vial cap stoppering system
- 50 recipes, each with up to 50 segments
- Software packet with remote control via virtual user interface
- Single/double compressor refrigeration system
- Wet vacuum pump build-in frame
- Dry Vacuum pup on request

Temperature



Vacuum & pressure





Device specifications:

- Perfected temperature control on shelves
- Smooth and easy to clean chamber & shelves
- Shelves and chamber made in AISI 304
- Exterior made in AISI 304
- Fully transparent door for product and condenser observation
- Vacuum control function
- Metering leak valve for air or nitrogen purging

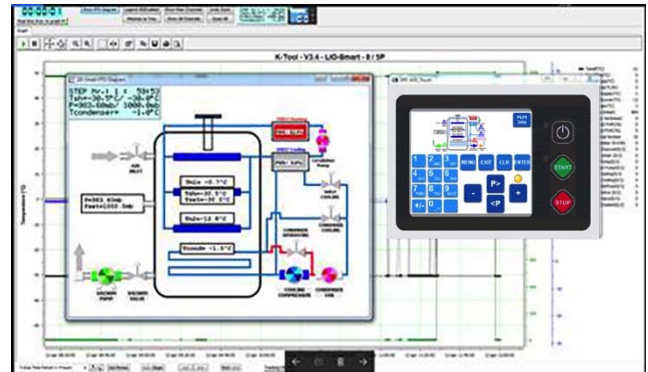


Technical Data:	LIOSMART 8/5P
External dimensions (WxDxH) in mm	750 x 750 x 1511
Chamber dimension (WxDxH) in mm	400 x 380 x 400
Ice condenser performance	4kg / 24h
Ice condenser temperature (°C)	-55°C (-90 °C optional)
Ice condenser defrost	Reverse refrigeration loop
Number of shelves	1 or 2 working + 1 guardian stoppering
Shelf size (WxD) in mm	300 x 300
Shelf surface	1 = 0.09 m ² or 2 = 0.18 m ²
Shelf spacing	max 80 mm (stoppering fully opened)
Shelf Temperature range (°C)	-40...+60 -50 + 60 optional
Temperature stability (°C)	+/- 0.1
Temperature uniformity (°C)	+/- 0.5...+/-1.2
Temperature set resolution (°C)	0.1
Cool down rate	From +40°C to 0°C...18 min
Heat up rate	From -40°C to +40°C...30 min
Cooling	Air cooled hermetic compressor system
Heating	Electrical
User interface	Touch screen fully programmable
Software	Windows compatible
Door	Fully transparent single handed closing
Power supply	3x400V / 50 Hz / 12A
Wattage (W)	3.200 (4.200 low temp)
Interface	RS 232 / USB PC drive
Temperature probe	PT-100 – shelf temperature
Vacuum pump	Wet RV or ,Dry: nXDS-10i -Edwards
Weight (kg)	200

User interface:



Software:



Dimensions:

