





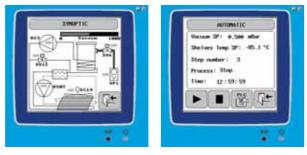
The optimal solution for laboratories:

With more than 45 years of experience, **Telstar** introduces the **New LyoAlfa** equipment, particularly suitable for research departments requiring large freeze-drying capacities.

This laboratory unit is especially suitable for the R&D centres in industries, universities, hospitals and scientific institutes. It has been designed according the GLP principles in order to comply with the strictest international standards.

This model incorporates unique and high level control performances, as well as excellent technical features.

LyoAlfa 10/15 control panel screens



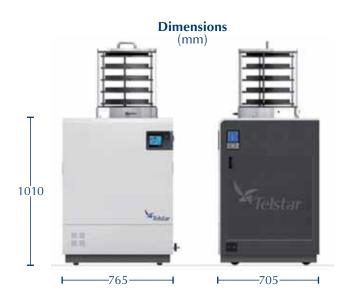


Outstanding features

- Compact console design with casters in order to make it easy to install.
- PLC controlled equipment: automatic pressure control and shelves temperature programming.
- Touch screen that displays system operation parameters and alarm messages. Very wide and useful information and setting selection is provided.
- Monitoring software LyoLogger to connect unit to PC: standard unit including RS232 port.
- Unit allows fully automatic or semiautomatic process. Auto-start up and automatic switch off routines are included.
- Two choices of temperature: -55°C and -85°C.

- Pressure control: automatic control of vacuum for faster freeze drying and reproducible results.
- Isolation valve between chamber and condenser, very useful to test freeze-drying end point by controlling the pressure raising in the chamber.
- Side mounted vacuum and drain connections with valves.
- Upright AISI 316L condenser with total capacity up to 22 kg.
- Automatic defrosting function. Condenser design allows easy and quick cleaning and defrosting.
- Wide range of accessories and options to accommodate to every freeze drying application.

Code	Model
37583	LyoAlfa Plus 10 -55
50224	LyoAlfa Plus 10 -85
37585	LyoAlfa Plus 15 -55
39204	LyoAlfa Plus 15 -85



Technical Data

		LyoAlfa Plus 10		LyoAlfa Plus 15	
Features	Units	LyoAlfa 10-55	LyoAlfa 10-85	LyoAlfa 15-55	LyoAlfa 15-85
Ice condenser capacity	kg	16,5	16,5	22	22
Final condenser temperature*	°C	-55	-85	-55	-85
Number of compressors	-	1	2	1	2
Base unit weight	kg	170	200	190	220
Total power	kW	2,8	3,4	3,2	4,3

*All temperatures are given for room temperature up to +21°C

Accessories

Ref.	Accessories	Description
		CHAMBER
34019	Chamber with	Acrylic cylinder chamber with 4 heated shelves (for raw material and bulk). It
+ 33506	isolation valve	includes an additional upper shelf in order to thermally balance the equipment.
		It also includes isolation valve between chamber and condenser.
34019	Stoppering chamber with	Acrylic cylinder chamber with 4 heated shelves and manual vial closing device
+ 34072	isolation valve	(for vials and serum). It includes an additional upper shelf in order to thermally
		balance the equipment. It also includes isolation valve between chamber and
		condenser.
		MANIFOLD
32893	12 port manifold	12 horizontal port stackable manifold including 12 rubber valves (for flasks or
		wide-neck filter bottles with connection CN29/32).
7917	40 port manifold	40 port manifold including 13 mm outer diameter tube manifold (for ampoules).
66626	Adaptor plate	Adaptor to place manifolds on the base unit.
65117	LyoLogger software	Software which allows connecting the equipment to a PC to monitor graphics
		and record data.

Accessories Technical Data

ACCESSORY	UNITS	DIMENSIONS
Chamber		
Dimensions chamber with isolation valve	mm	Ø 400 x 480
Dimensions stoppering chamber with isolation valve	mm	Ø 400 x 645
Product tray dimensions	mm	Ø 300
Clearance between shelves	mm	70
Total loading surface	cm ²	2825
Manifold		
Drying in round bottom flasks or wide-neck filter bottles	units	12/24
Drying in ampoules	units	40/80



Chamber



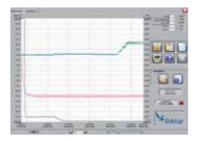
Stoppering chamber



40 port manifold



Stackable 12 port manifold with adaptor plate



LyoLogger software screen