



# *Telstar<sup>®</sup> LyoQuest*

*Laboratory Freeze-dryer*





Extremely compact while incorporating robust technical features and outstanding control performances.

The Telstar **LyoQuest** benchtop freeze dryer has been developed to meet the most demanding requirements of a research freeze dryer.

Based on more than 40 years of experience, Telstar introduces the **LyoQuest** as state of the art in performance and process control. The unit was specifically developed for basic research in biotechnology and scientific institutes.

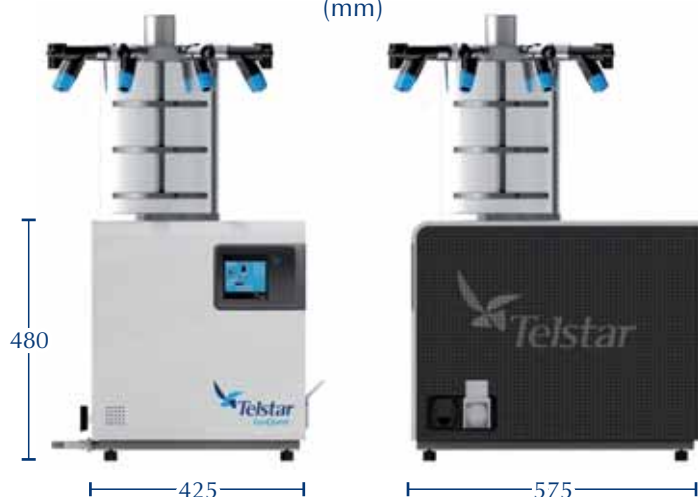
LyoQuest control panel screens



### Outstanding features

- Extremely compact bench mounted table-top unit. Large capacities of condensation (6 kg/24 h) in the minimum possible space.
- Two different process oriented control systems, both PLC based, adapts the unit to every requirement:
  - Basic control for **LyoQuest** Series: allows automatic pressure control and shelves temperature control.
  - Plus control for **LyoQuest Plus** Series: allows automatic pressure control and shelves temperature programming.
- Touch screen that displays system operation parameters and alarm messages. Descriptive and timely information display and setting selection is provided.
- Monitoring software (LyoLogger) to connect unit to PC available.
- **LyoQuest Plus** allows fully automatic or semiautomatic work. Auto-start up and automatic switch off routines are included.
- Pressure control: manual control (for **LyoQuest** Series) or automatic control of vacuum (for **LyoQuest Plus** Series) for faster freeze drying and reproducible results.
- Side mounted vacuum and drain connections with valves.
- Upright AISI 316L condenser with total capacity of 8 kg, which permits freezing of the samples.
- Automatic defrosting function. Condenser design allows easy and quick cleaning and defrosting.
- Two choices of temperature: -55°C and -85°C.
- Wide range of accessories and options to accommodate every freeze drying application.

### Dimensions (mm)



Code	Model
61644	LyoQuest -55 / 230 V 50Hz
58201	LyoQuest -85 / 230 V 50 Hz
61646	LyoQuest -55 / 230 V 60 Hz
61647	LyoQuest -85 / 230 V 60 Hz
61646	LyoQuest -55 / 208 V 60 Hz
61647	LyoQuest -85 / 208 V 60 Hz
61653	LyoQuest -55 Plus / 230 V 50Hz
61654	LyoQuest -85 Plus / 230 V 50 Hz
61655	LyoQuest -55 Plus / 230 V 60 Hz
61656	LyoQuest -85 Plus / 230 V 60 Hz
61655	LyoQuest -55 Plus / 208 V 60 Hz
61656	LyoQuest -85 Plus / 208 V 60 Hz

### Technical Data

Features	Units	LyoQuest		LyoQuest Plus	
		LyoQuest -55	LyoQuest -85	LyoQuest -55	LyoQuest -85
Ice condenser capacity	kg	8 (5 kg/24h)	8 (6 kg/24h)	8 (5 kg/24h)	8 (6 kg/24h)
Final condenser temperature*	°C	<-55	<-85	<-55	<-85
Number of compressors	-	1	2	1	2
Base unit weight	kg	65	70	65	70
Total power	kW	1,1	1,4	1,1	1,4

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

### Accessories (only available for LyoQuest Plus)

#### Standard Chamber (allows control of temperature from ambient temperature to +70°C)

Reference	Accessories	Description
62302	Standard chamber	Cylindrical acrylic chamber with 3 heated shelves (for raw material and bulk)
61660	Standard chamber with 8 port manifold	Cylindrical acrylic chamber with 3 heated shelves (for raw material and bulk), and 8 port manifold with valves (for flasks or wide-neck filter bottles with CN29/32 connection)
61659	Standard stoppering chamber	Cylindrical acrylic chamber with 3 heated shelves, manual vial closing device (for vials and serum)
58913	Standard stoppering chamber with 8 port manifold	Cylindrical acrylic chamber with 3 heated shelves (for vials and serum), manual vial closing device and 8 port manifold with valves (for flasks or wide-neck filter bottles with CN29/32 connection)

#### Large capacity chamber (allows control of temperature from ambient temperature to +70°C)

Reference	Accessories	Description
71280	Large capacity chamber	Cylindrical acrylic chamber with 3 heated shelves (for raw material and bulk)
71280 + 7904	Large capacity stoppering chamber	Cylindrical acrylic chamber with 3 heated shelves, manual vial closing device (for vials and serum)

### Accessories (available for LyoQuest and LyoQuest Plus)

#### Manifolds

Reference	Accessories	Description
75292	Standard unheated chamber	Cylindrical acrylic unheated chamber with 3 shelves
70205	8 port manifold	8 port manifold including 8 rubber three way 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)
62332	Adaptor plate for manifolds and large capacity chamber	Adaptor to place manifolds and large capacity chambers on the base unit
61683	Drip tray	Tray which protects the freeze-dryer from condensation

## Accessories Technical Data

Accessory	Units	LyoQuest
<b>STANDARD CHAMBER</b>		
Dimensions, standard unheated chamber	mm	Ø215x300
Dimensions, standard chamber	mm	Ø215x300
Dimensions, standard chamber with 8 port manifold	mm	Ø490x300
Dimensions, standard stoppering chamber	mm	Ø215x470
Dimensions, standard stoppering chamber with 8 port manifold	mm	Ø490x470
Tray dimensions	mm	Ø160
Distance between shelves	mm	70
Total loading surface of the product trays	cm <sup>2</sup>	600
<b>LARGE CAPACITY CHAMBER</b>		
Dimensions, large capacity chamber	mm	Ø315x440
Dimensions, large capacity stoppering chamber	mm	Ø315x640
Tray dimensions	mm	Ø240
Distance between shelves	mm	70
Total loading surface of the product trays	cm <sup>2</sup>	1350
<b>MANIFOLD</b>		
Drying in round bottom flasks or wide-neck filter bottles	units	8/16
Drying in ampoules	units	40/80
Drip tray	mm	Ø730



Standard stoppering chamber with 8 port manifold



Standard chamber with 8 port manifold



Standard chamber



Stoppering chamber



Large capacity chamber



Large capacity stoppering chamber



40 port manifold



8 port manifold



Drip tray



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