



Telstar[®] LyoQuest

Laboratory Freeze-dryer



DOMINIQUE REITSCHER SAS

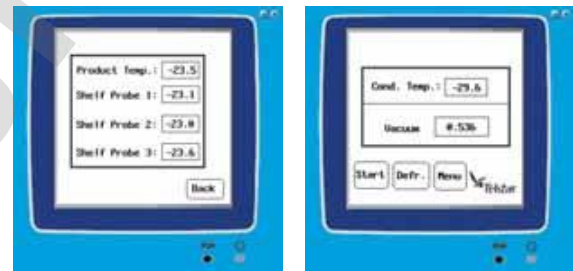


Extremely compact while incorporating robust technical features and outstanding control performances.

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

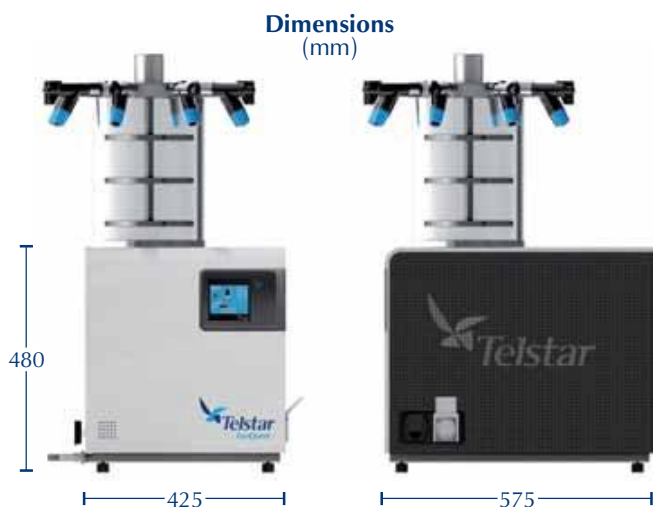
Based on more than 40 years of experience, Telstar introduces the **LyoQuest** as state of the art in performance and process control. The unit was specifically developed for basic research in biotechnology and scientific institutes.

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.



| 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 |
|--|-----------------|----------|
| STANDARD CHAMBER | | |
| 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 ² | 600 |
| LARGE CAPACITY CHAMBER | | |
| 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 ² | 1350 |
| MANIFOLD | | |
| 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



Av. Font i Sagué, 55
Parc Científic i Tecnològic Orbital 40
08227 Terrassa (Spain)
T +34 937 361 600
F +34 937 859 342

Benisoda, 3
28042 Madrid (Spain)
T +34 913 717 525
F +34 917 477 530



www.telstar-lifesciences.com