

COOLSAFE 4-15 LITRES

CoolSafe 4-15 L is an outstanding and versatile range of advanced bench-top freeze dryers. They are the product of more than 40 years' experience and expertise, and are the ideal choice for research, process development and small-scale production.

Available in 3 different capacities:

- · 4 litres. ·
- 9 litres. •

15 litres.

All come with a choice of condenser temperatures and a wide range of high-quality chambers and accessories. All models offer both simplicity of operation and the highest performance characteristics to meet the demands of today's research and development laboratories.

Proven track record in:

- · Quality control typically for:
- Food materials.
- Bacteria.
- Meat and dairy products.
- · Improved preservation typically for:
 - Floral materials.
 - Vaccines and anti-toxins.
 - Tissues and cells.
 - Fish, shellfish, milk (such as goat & horse milk) and dairy products, vegetables, edible mycelia, soft fruits and berries etc.
- · Conservation of archaeological items, such as wood, leather, textiles etc.
- Restoration of water damaged books, documents and paper materials.

The CoolSafe 4-15 L range is suitable for research, testing and production on a minor scale.





- Lowest condenser temperatures of -55°C, -95°C, -100°C or -110°C.
- · Seamless stainless steel condenser with external cooling coils, heavily insulated to conserve energy and increase performance.
- Easy draining with built-in valve, allowing removal of water after a completed freeze-drying session.
- Easy operation with a built-in vacuum valve connecting the condenser and vacuum pump and allowing the condenser to cool down and the vacuum pump to warm up separately, ensuring an efficient start-up sequence.





COOLSAFE BASIC

- · Digital display of the condenser temperature.
- Wide choice of small chambers, manifolds and accessories to suit your sample requirements.
- Available with 4-litre condenser capacity and temperature options of -55°C or -110°C and condenser ice capacity of 2.5 kg/24 hours max. 3 kg in total.
- Available with 9-litre condenser capacity and temperature option of -55°C and condenser ice capacity of 4 kg/24 hours max. 7 kg in total.

COOLSAFE PRO

- Digital display of the condenser temperature and pressure.
- · Wide choice of manifolds, chambers and accessories to suit your sample requirements.
- Available with 4-litre condenser capacity and temperature options of -55°C or -110°C and condenser ice capacity of 2.5 kg/24 hours max. 3 kg in total.
- Available with 9-litre condenser capacity and temperature options of -55°C or -100°C and condenser ice capacity of 4 kg/24 hours max. 7 kg in total.
- Available with 15-litre condenser capacity and temperature options of -55°C or -95°C and condenser ice capacity of 6 kg/24 hours max. 10 kg in total.





COOLSAFE TOUCH

- · New touchscreen controller with regulation of temperature,
- pressure and time.
- Freeze-drying with programming and storage of protocols for full research and method development.
- Wide choice of manifolds, chambers with heated shelves and accessories to suit your sample requirements.
- Available with 4-litre condenser capacity and temperature options of -55°C or -110°C and condenser ice capacity of 2.5 kg/24 hours max. 3 kg in total.
- Available with 9-litre condenser capacity and temperature options of -55°C or -100°C and condenser ice capacity of 4 kg/24 hours max. 7 kg in total.
- Available with 15-litre condenser capacity and temperature options of -55°C or -95°C and condenser ice capacity of 6 kg/24 hours max. 10 kg in total.

COOLSAFE SUPERIOR XS/XL

- New touchscreen controller with regulation of temperature, pressure and time.
- · Possibility of pre-freezing your samples.
- Freeze-drying with programming and storage of protocols for full research and method development.
- With the automatic system, it is possible to create your own personal program for each sample starting with pre-freeze, then primary drying and ending with secondary drying. This secures the highest performance and ensures that the quality of your samples will be the same every time.
- Chamber with 3 electrically heated shelves inside the condenser, with the option of having up to 5 electrically heated shelves in the XL model.
- PT sensors for precise shelf temperature regulation.
- XS is available with a 9-litre condenser and a temperature option of -100°C.
- XL is available with a 15-litre condenser and a temperature option of -95°C.