

Laboratory

# Water Distillation

DS 2000

DS 4000

DS 8000

DS 8008

DS 8012

DS 8025

 DragLab

## Connect & Go



## Laboratory Water Still DS 4000

The DragLab Water Still is a professional, fully automatic water distiller constructed from high-quality stainless steel. It is designed to produce **4 L/h of high-purity distillate** with minimal personnel supervision.



### Effortless Water Purity With DragLab Distillation Solutions

DragLab Distillation Units are professional, fully automatic devices designed to produce high-purity distilled water, requiring only a connection to a raw water supply and a power source. The distillation process involves heating raw water (tap water) to generate steam and then condensing the steam back into liquid water. This process effectively separates water from impurities with higher boiling points. The resulting condensate is distilled water with a purity of approximately 99.5%, removing salts, organic substances, microorganisms, pyrogens, and bacteria. DragLab Water Distillation Units require minimal maintenance, primarily consisting of regular cleaning. When carbon dioxide from the air dissolves in distilled water, it can form carbonic acid, causing the pH to become slightly acidic, typically in the range of 5.0 to 5.6. Distilled water should be used promptly or stored in airtight conditions to maintain its purity.

### Application:

- Biotechnology, cell culture and media preparation
- Testing, analysis and research laboratories
- Microbiology and Bacteriology sample preparation
- Food and beverage production
- Sterilization, cleaning and Medical equipment.
- Cosmetics, skincare products production.
- Electronics and automotive industries
- Pharmaceutical manufacturing and drug formulation.

A vertical bar with the colors of the German flag: black, red, and gold.

# Quality and Expertise



DragLab is certified to ISO 9001:2015, reflecting our unwavering commitment to quality and excellence. We continuously optimize our production processes, ensuring that every step is efficient and effective. Through ongoing development and innovation, we strive to meet and exceed industry standards. Our customer-centric approach prioritizes the needs and satisfaction of our clients, driving us to maintain rigorous quality assurance protocols. This dedication ensures that laboratory equipment manufactured by DragLab consistently meets the highest standards of quality and reliability.

DragLab Laboratory Devices are meticulously designed and manufactured from high-quality materials to meet the most rigorous requirements of our customers. Our commitment to excellence and innovation drives continuous development and improvement, informed by daily usage and ongoing technological advancements. 'Quality and Expertise' is not just about creating impressive product designs; it reflects our company's policy of prioritizing high preparedness and customer-centric service as our fundamental objective. This dedication extends to all DragLab products, which comply with current European standards and bear the CE mark.



## Laboratory Water Still DS 4000

The DragLab Water Still is a professional, fully automatic water distiller constructed from high-quality stainless steel. It is designed to produce 4 L/h of high-purity distillate with minimal personnel supervision.

### Features

#### Distillation Capacity

Produces 4 L/h of distilled water.

#### Purity

Produces high-purity distilled water with a conductivity of approximately 2.3  $\mu\text{S}/\text{cm}$  at 25 °C.

#### Water Quality

Produces pyrogen-free, low-gas, and bacteria-free water.

#### Protection

Automatic thermostatic low-water cut-off protects the heating element in case of insufficient water.

#### Operation

Automatic water switching enables continuous operation.

#### Maintenance

The easily accessible evaporator tank facilitates cleaning and routine maintenance.

#### Material

All water-contact components are made of stainless steel (material no. EN 1.4301).

#### Heating Element

The heating element is made of stainless steel (material no. EN 1.4301).

#### Housing

Galvanized steel housing with electrostatic powder coating.

#### Installation

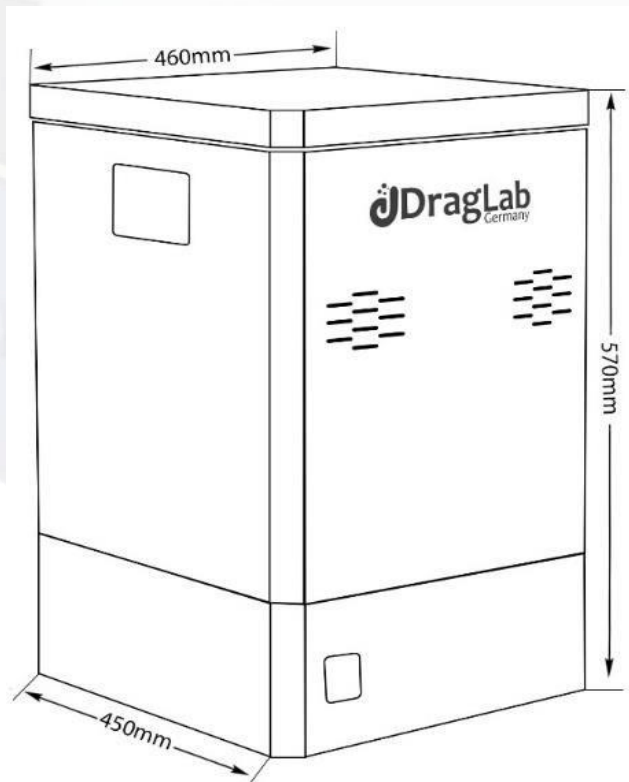
Suitable for both bench-top and wall mounting.

#### Accessories

All parts and accessories required for installation are included.



### Dimensions:



## Laboratory Water Still DS 4000

### Specifications:

#### Capacity

|                   |                                                    |
|-------------------|----------------------------------------------------|
| Capacity          | 4 L/h                                              |
| Water Consumption | 40 L/h                                             |
| Conductivity      | Approximately 2.3 $\mu\text{S}/\text{cm}$ at 25 °C |

#### Control technology

|                            |                                                                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Automatic Protection       | Automatic thermostatic power cut-off protects the heating element in case of low water level.                                                         |
| Automatic Power Activation | Automatic power activation when the water level reaches the safety line in the evaporator tank to protect the heating element.                        |
| Water supply               | Built-in solenoid valve connection for the evaporator and condenser, with automatic switching on/off based on the water level in the evaporator tank. |

#### Standard equipment

|                                     |                                                                                                                                    |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Internal Material - Evaporator Tank | The evaporator tank is made of stainless steel (material no. EN 1.4301).                                                           |
| Internal Material - Condenser       | The condenser is made of stainless steel (material no. EN 1.4876).                                                                 |
| Internal Material - Heating Element | The heating element is made of stainless steel (material no. EN 1.4876).                                                           |
| External material                   | The housing is made of galvanized steel with an electrostatic powder coating.                                                      |
| Degassing system                    | The unit includes a top vent for effective degassing, ensuring pyrogen-free, low-gas, and bacteria-free water.                     |
| Interior Access                     | The evaporator is easily accessible for cleaning and maintenance, facilitating efficient cleaning procedures.                      |
| Installation                        | All necessary parts and accessories for installation are included.                                                                 |
| Distillate Withdrawal               | Distilled water can be continuously withdrawn by opening the drain tap.                                                            |
| Main switch                         | The main power switch is located on the front of the unit.                                                                         |
| LED Indicators                      | Two LED indicators are located on the front of the unit: a green LED indicating standby operation and a red LED indicating faults. |
| Mounting                            | Suitable for both benchtop and wall mounting.                                                                                      |

#### Safety

|                        |                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|
| Water Level Protection | Low-water-level sensor with automatic power cut-off to protect the heating element. |
| Heating Protection     | Overheating cut-off                                                                 |
| Fault Indicator        | Red LED alarm indicator for faults and errors.                                      |
| Degassing              | Top vent for degassing, ensuring pyrogen-free, low-gas, and bacteria-free water.    |
| Power connection       | Power cable with a German Schuko-type plug.                                         |



## Laboratory Water Still DS 4000

### Specifications:

#### Connection

|                              |                                                                                                                         |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Water inlet</b>           | The cooling water inlet is located on the right-hand side of the unit and has a diameter of 3/4 inch (Ø 19.05 mm).      |
| <b>Water pressure range</b>  | 2-10 bar                                                                                                                |
| <b>Water outlet</b>          | The cooling water outlet is located on the right-hand side of the unit, with a diameter of 2/5 inch (inner Ø 10.16 mm). |
| <b>Drainage tap</b>          | The drainage tap is located on the right-hand side of the unit, with a diameter of 2/5 inch (inner Ø 10.16 mm).         |
| <b>Distillate Withdrawal</b> | Distilled water can be continuously withdrawn by opening the drain tap.                                                 |
| <b>Power Connection</b>      | The main power connection cable is located on the left-hand side of the unit.                                           |

#### Electrical data

|                |                 |
|----------------|-----------------|
| <b>Voltage</b> | 230 V, 50/60 Hz |
| <b>Power</b>   | 3000 W          |

#### Shipping information

|                              |                       |
|------------------------------|-----------------------|
| <b>Customs tariff number</b> | 8419 4090             |
| <b>Packaging Dimension</b>   | 53 W × 50 D × 75 H cm |
| <b>Net weight</b>            | 22 Kg                 |
| <b>Gross weight carton</b>   | 27 Kg                 |

### Order Information:

| Description                    | Model   | Article number |
|--------------------------------|---------|----------------|
| Water still 4L/h, 230V/50-60Hz | DS 4000 | 5042.000       |

