

## HSD 241-52 dry and storage cabinet

Our HSD series was developed to protect sensitive components from damage caused by moisture and oxidation. The Dynamic Dry Unit U 5002 guarantees a quick recovery time after door openings and is ideally suited to for applications requiring frequent cabinet access. The HSD series guarantees optimum storage and drying conditions at a relative humidity of below <math><0.5\%</math>. The cabinet's exceptional features include its closed loop, dynamic regeneration process, a high precision sensor and reliable control unit.

**Equipment:** The cabinet is ESD powder coated white/beige and supplied with 2 height adjustable slit perforated sliding shelves on rails. (ESD safe) These can be mounted individually within a height grid of 5 cm increments. Each shelf has a load capacity of approximately 50 kg. It is fitted with a 30mm glass door with magnetic sealing, and supplied in wooden crate

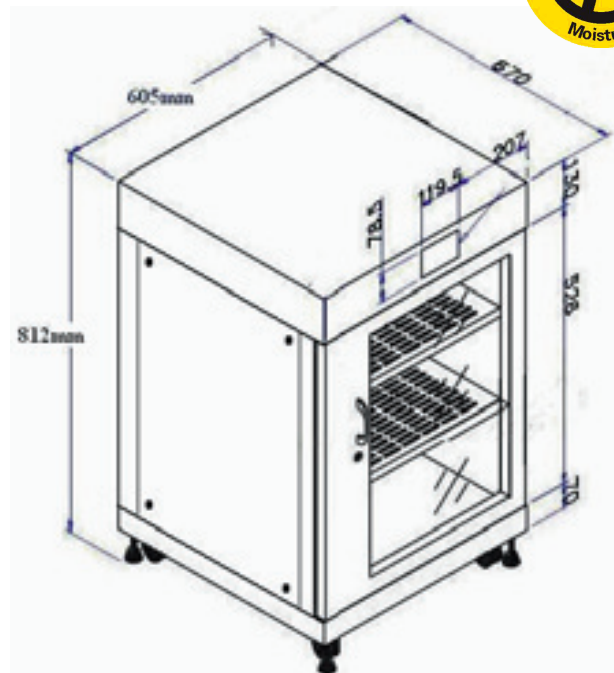
**Operation:** The clear and user-friendly text display offers easily legible measurement value monitoring and plain text display of all relevant information. Data is entered via the integrated control panel. Expected values for humidity and temperature and also the limit values for the integrated alarm can be set easily and conveniently.

**Alarm:** A humidity alarm is triggered if the humidity for a particular period of time rises above the desired value. There is also an alarm if the door is left open too long. An optional external signal tower provides an optical display of alarm signals. E-mail and SMS messaging are also available.

**Sensor:** The Rotronic high-performance sensor has a precision of  $\pm 1\%$  RH (optionally available 0.6% RH). A data logger integrated into the sensor records humidity and temperature and can, if necessary, be read out via an optional software application. Simple recalibration of the cabinet is performed through exchange with a newly calibrated replacement sensor.

**ESD protection:** Every Super Dry cabinet carries an EPA symbol which confirms that the resistance value for the cabinet surface complies with the requirements of IEC613405-01.

**Drying capacity:** The drying curve shown refers to our HSD model series. These require approximately 240 seconds to dry from 50% down to below 5% RH at 25°C when empty. Due to the high-performance drying unit, the humidity rises above 20% RH if the door is open. The maximum drying performance is below 0.5 % RH.

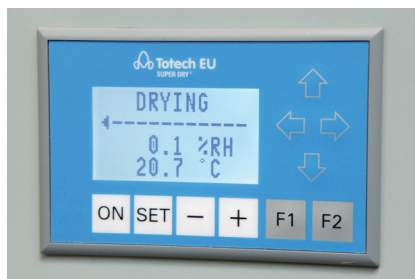


### Technical Data

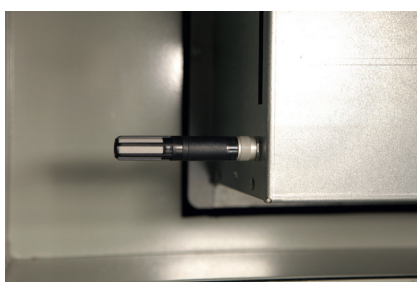
External Dimension	605 x 670 x 812 mm
Internal Dimension	605 x 670 x 812 mm
Weight	55 kg
Volume	240 l
Dry Unit	1 x U-5001 for 0.5 % RH
Control	Digital
Number of doors	1 lockable door
Average power consumption	30 W/hr=25.3 kW/month



Dry Unit U 5001



Sensor Control System



Rotronic Sensor



Perforated shelf

### U 5002 Dynamic Drying Unit

Our new, U 5002 dynamic drying unit guarantees noiseless, maintenance-free operation with dynamic recovery as required. Dry cabinet recovery is not required if the cabinet remains closed. Energy consumption is thus reduced to a minimum. Should higher humidity occur due to an open door, the regeneration cycle and the duration adapt automatically to the change in conditions. With an average of 8 recovery minutes within 24 hours the U 5001 is exemplary for optimum drying performance with minimal energy requirements.

### Optional data monitoring

In addition to direct read out on the data logger, an online connection to a computer can also be set up via standard RS 232 interface. This means that data from several cabinets can be logged online by connection to a network. In addition, various alarms and automatic logging can be activated in case of limit value exceedance (e.g. via email). The appropriate software is programmed by software engineers in a product-specific manner and is continuously maintained. This means optimum benefit and fast and competent support at all times. The modern HW4 software offers a wide range of functionality from basic functions up to OPC server functionality. The HW4 software is the most comprehensive and user-friendly validatable software for moisture measurement devices currently available on the market.

### Options

External signal lamp, Heating up to 40°C, Manual nitrogen flooding system, Automatic nitrogen flooding system, HW4 software, Stainless steel shelves, Shelf dividers, SMD Reel Racks

### Drying Performance

The humidity curve shows the drying performance of the HSD cabinet taking only 4 minutes to move from 50%RH to less than 5% under unloaded conditions at 25°C. Optimal humidity levels are under 0.5%RH.

### open door test

