



## SD 151-21



The SD Series is equipped with a patented U 2000 Drying Unit. It is engineered for medium to long-term constant low humidity storage of 1% RH.

Humidity, temperature & alarm functions are shown and can be adjusted on a digital display.

The circulation of air in the cabinet is regulated through an internal fan.

All surfaces are ESD coated in conformity with current ESD 61340-5-1 standard.

The SD-151-21 is ideal for the moisture-proof and anti-oxidation storage of wide-ranging technologies and conforms with IPC/JEDEC J- STD-033C & IPC-1601.



## Features

- **Accuracy of sensor RH% & T°C**
- **Lockable doors**
- **ESD safe design**
- **Shelves**
- **Door alarm**
- **Dry unit**
- **ESD bonding point**
- **21 series digital panel**
- **Pre mounted holes**
- **Power supply**
- +/- 3% RH, +/-0.3 °C
- Door locked with key
- Norm (IEC 61340-5-1)
- ESD metal painted body (10<sup>6</sup> Ohm/sq).
- Dissipative glazing (inside and outside 10<sup>8</sup> Ohm/sq)
- 3 height adjustable chrome steel shelves
- Door is equipped with a switch which triggers the humidity or door alarm if the preset value is exceeded
- U 2000 Dry Unit.
- ESD wristband can be connected with the cabinet
- Very convenient settings of RH%, temperature, alarm and calibration functions.
- For nitrogen unit & heater
- 5 meter cable with IEC plug

## Benefits

- **Maintenance**
- **Highly energy sufficient**
- **Option availability**
- **Recoverytime after door opening**
- **Adjustable legs**
- **Datalogging**
- **Temperature**
- **IPC**
- The drying unit is maintenance free
- Average power consumption 35 W/h
- N2 auto Flow, Heating, SMD Reel racks, etc.
- <15 min to below 1%. (after 1 door opening)
- For levelling out
- Through network with software
- Maximum up to 40 °C (optional)
- According to IPC/JEDEC J- STD 033C & IPC-1601



## Technical Data Cabinet

- External dimensions: (W x H x D) 500 x 630 x 580 mm
- Internal dimensions: (W x H x D) 490 x 560 x 450(530) mm
- Weight: 37.1 kg
- Max weight on shelf: 30 kg
- Max. loading capacity: 100 kg
- Body: Steel, conductive coated  $10^6$ - $10^8$   $\Omega$ /sq
- Shelves (W x D): 3 pcs, 468 x 380 mm adjustable
- Volume: 135 L
- Voltage: 230 V AC (120 V AC optional)
- Power consumption: 35 W/h
- Protection class: Hard grounded, Class 1
- Humidity level cabinet: Drying 1% RH \*

\*(depending on amount of door openings)

## Technical Data Dry Unit U-2000

- Control: Adjustable with control panel 21-series
- Voltage level: 230 V/50 Hz. (optional 120 V/60 Hz)
- Power consumption: 35 W/h
- Dimensions: W x L X D = 260 mm x 380 mm x 100 mm
- Weight: 8.1 kg.

## Technical Data 21 Display

### Settings:

- Nominal humidity value
- Nominal humidity value alarm (light)
- Time delay humidity alarm
- Nominal temperature value
- Door alarm buzzer
- Offset possibilities



## Technical Data N<sup>2</sup> (Auto) Flow

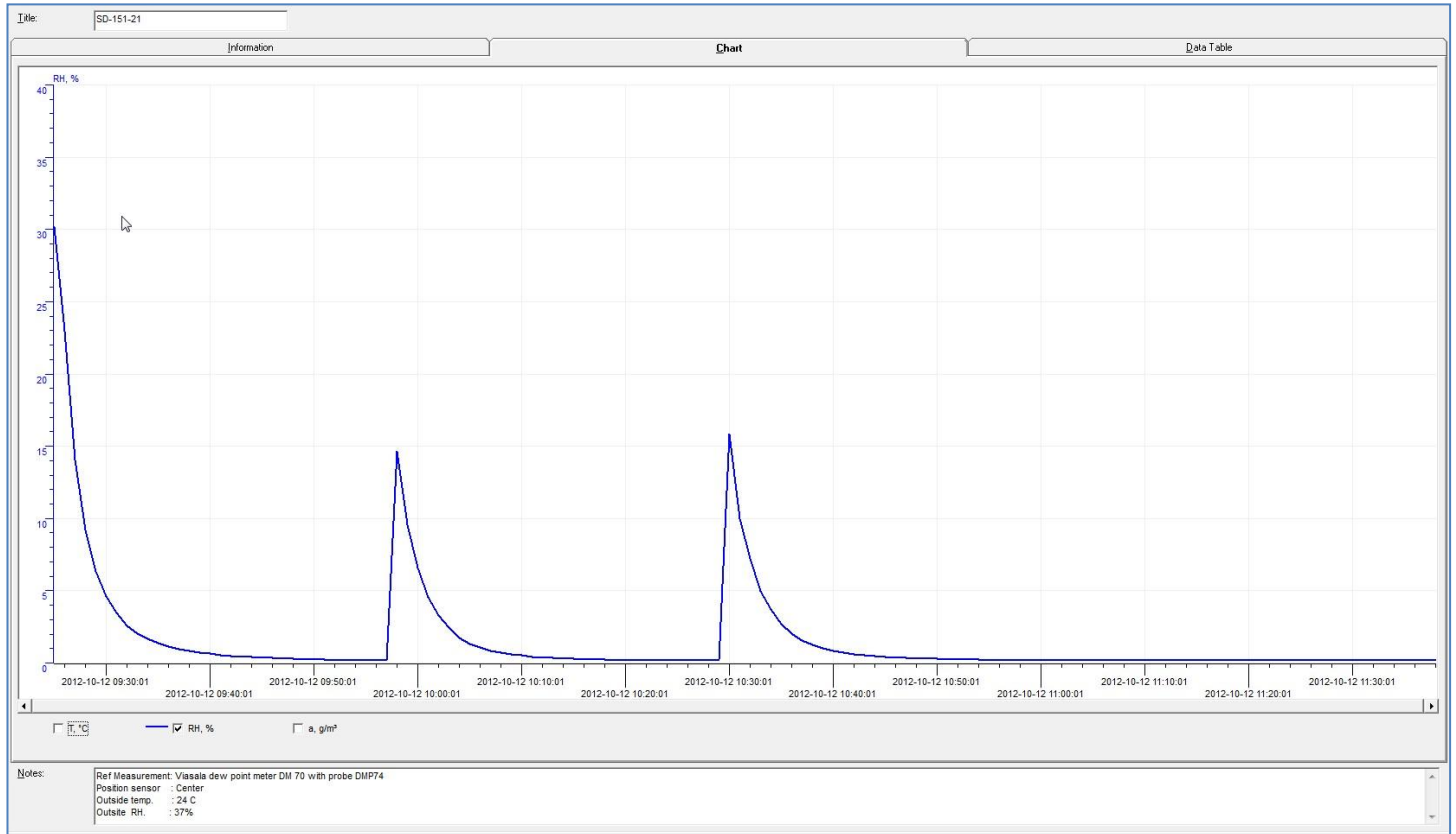
- Power supply: 230 V AC (110 V AC optional)
- N<sup>2</sup> Connection: 8 mm hose connection
- N<sup>2</sup> Pressure: 1 – 6 bar
- N<sup>2</sup> Standby- amount: 0 – 25 L/min
- N<sup>2</sup> Purge: 0 – 25 L/min

## Technical Data Heater SH 230-1

- Voltage: 230 V AC (110 V AC optional)
- Frequency AC: 50/60 Hz
- Power: 530 W
- Temperature sensor: PTC 100
- Thermal protection: 90 °C
- Temperature range: 30 – 40 °C
- Air Flow: 86 M<sup>3</sup>/H
- Display tolerance: 1 digit at 25 °C



## Performance



## Test conditions



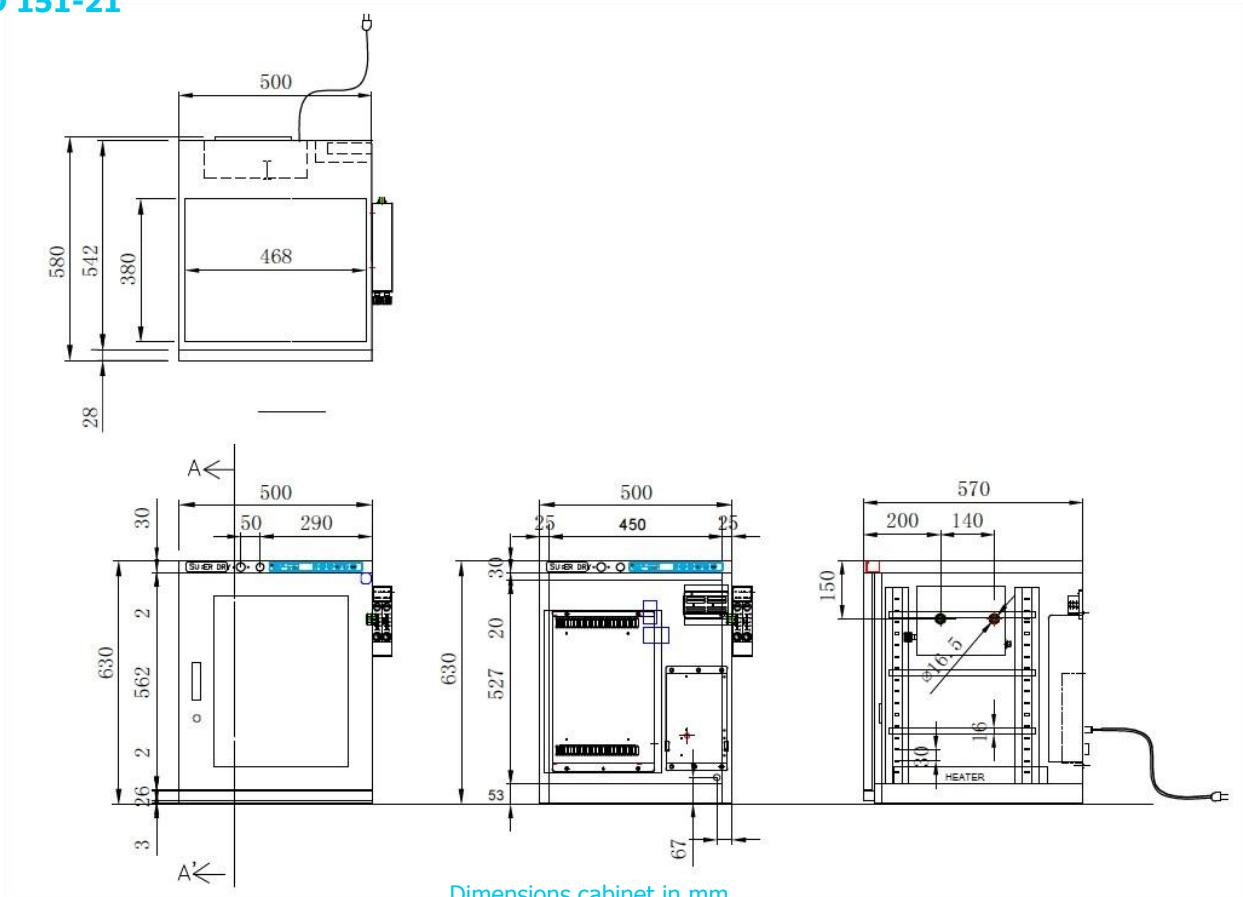
Instrument:  
 Type of dew point sensor:  
 Accuracy of dew point sensor:  
 Location of sensor:  
 Ambient conditions:  
 Door openings:

Vaisala.  
 Vaisala drycap 180M  
 $\pm 0,2^{\circ} \text{C}$  at  $+ 20^{\circ} \text{C}$  ( $+ 68^{\circ} \text{F}$ )  
 In the direct surrounding of cabinet sensor  
 Humidity  $50 \pm 5\% \text{ rH}$ ,  $25^{\circ} \pm 2^{\circ} \text{C}$ , Pressure  $994 \pm 20 \text{ hPa}$ .  
 2 door openings, 15 sec. (average RH 0.70%)



## Technical Drawings

### SD 151-21



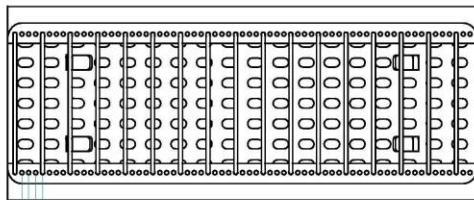
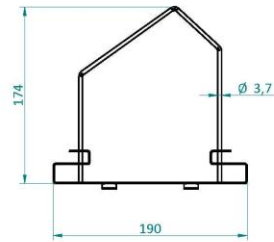
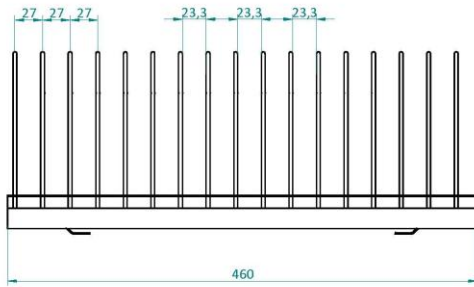
Number of shelves	1	2	3
Distance (in mm) between shelves if equally spaced		165	103
Remaining space between top shelf and top beam	295	155	120
Remaining space between bottom shelf and bottom cabinet	265	175	145
Shelves are adjustable every (cm)	30	30	30
Loading capacity shelves m <sup>2</sup> (468 mm x 380 mm)	0,18	0,35	0,53

Measurements can slightly deviate.

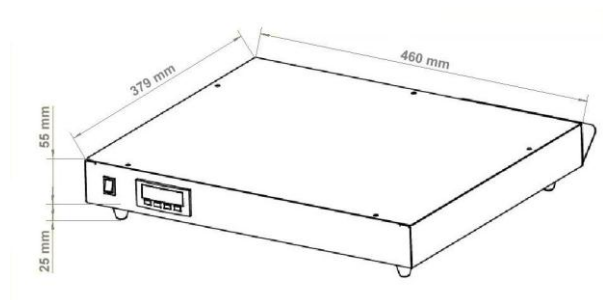




## Technical Drawings



Dimensions of the SMD Reel Rack, item number 20014000



Dimensions of the heater SH 230-1, item number 21001300



## Options



### N2 Auto Flow System

The Auto Flow System is developed for use in combination with a Totech drying cabinet. The device is used for the quick removal of moisture in the cabinet after the doors have been opened. The drying process is realized by using nitrogen (N<sup>2</sup>), which is added automatically after the doors have been closed (by means of adjustable timer function)

Item number 22613001



### N2 Flow System 10-100

The N2 Flow System is developed for use in combination with a Totech drying cabinet. The device is used for the quick removal of moisture in the cabinet. The drying process is realized by using nitrogen (N<sup>2</sup>). Adjustable 10 – 100 L/min

Item number 20010020.



### SMD reel rack

460 mm length

Item number 20014000

### SMD reel supports

Reel support for 20014000

Item number 20014200



### Humidity calibrator Hygropalm 22

Precision measuring device for calibrating sensors

Set includes Hygroclip sensor, case and cable

Item number 20001019

Hygropalm only

Item number 20001016



### Heater SH 230-1

40°C heater

Item number 21001300



### Humidity alarm light - Red or Orange

Item number 20016033





## Options



### Shelf

Chrome steel shelf

Item number 20001510

Brackets 4 pcs, item number 30003010



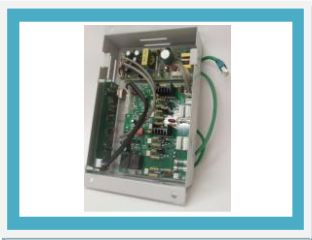
### Set of spare parts for SD cabinet

Set includes the main spare parts for the SD cabinet: U-2000 Dry Unit, main PCB and power supply.

Item number 30006099

**Exchange set of spare parts SD cabinet,**  
Same set as above, but as exchange.

Item number 30006096



### SD network PCB incl. software

Item number 20024220

