

## SD 1104-21



### Storage Cabinet



The SD 1104-21 is equipped with two patented drying units U-2000. Engineered for medium to long-term constant low humidity storage of  $\leq 1\%$  RH.

Humidity and alarm function shown can be adjusted on a digital display. The temperature can be read out.

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

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

The SD-1104-21 is ideal for the moisture-proof and anti-oxidation storage of wide-ranging technologies and conforms with IPC/JEDEC J-STD 033C & IPC-1601.



## SD 1104-21

### Features

✓ <b>Accuracy of sensor RH% &amp; T°C</b>	+/- 3% RH, +/- 0,3°C
✓ <b>Lockable doors</b>	4 doors locked with key
✓ <b>ESD safe design</b>	Norm (IEC 61340-5-1) ESD metal painted body (<10 <sup>6</sup> Ohm/sq) Dissipative glazing (in- and outside 10 <sup>8</sup> Ohm/sq)
✓ <b>Shelves</b>	5 in height adjustable chrome steel shelves
✓ <b>Alarms</b>	Door is equipped with a switch and humidity is monitored which triggers the alarm if the preset value is exceeded
✓ <b>Dry unit</b>	2 x U-2000 drying unit
✓ <b>ESD bonding point</b>	ESD wristband can be connected with the cabinet
✓ <b>1 series digital panel</b>	Very convenient settings of RH%, temperature, alarm and calibration functions
✓ <b>Pre mounted holes</b>	For nitrogen unit & heater
✓ <b>Power supply</b>	Power cord 5 meter with IEC plug

### Benefits

✓ <b>Highly energy efficient</b>	Average power consumption 35 W/h
✓ <b>Option availability</b>	Feeder systems, N <sup>2</sup> auto flow, heating, SMD Reel racks etc.
✓ <b>Recovery time after door opening</b>	<30 minutes to reach below 5%
✓ <b>Adjustable legs</b>	For leveling out
✓ <b>Data logging</b>	Through network with software and optional hardware
✓ <b>Temperature</b>	Maximum up to 40°C (optional)
✓ <b>Maintenance</b>	The drying units are maintenance free
✓ <b>IPC</b>	According to IPC/JEDEC J- STD 033C & IPC-1601

## SD 1104-21

### Technical data cabinet

- ✓ External dimensions: (W x H x D) 1200 x 1675(1840) x 660 mm
- ✓ Internal dimensions: (W x H x D) 1190 x 1533 x 630 mm
- ✓ Weight: 197 kg
- ✓ Weight on shelf: 50 kg
- ✓ Max. loading capacity: 300 kg
- ✓ Shelves (WxD): 5 pcs, 1150 x 490 mm.
- ✓ Volume: 1179 L
- ✓ Electric supply: 230 VAC (120 VAC optional)
- ✓ Power consumption: 70 W/h
- ✓ Protection class: Class 1, hard grounded
- ✓ Humidity level cabinet: Drying <2% RH
- ✓ Body: Steel, conductive coated 10<sup>6</sup>-10<sup>8</sup> Ω/sq

### Technical data type 1 display

#### Settings

- ✓ Nominal value humidity
- ✓ Nominal value humidity alarm (light)
- ✓ Delay time humidity alarm
- ✓ Nominal value temperature
- ✓ Door alarm buzzer
- ✓ Offset possibilities



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

- ✓ Power supply: 230VAC (120VAC optional)
- ✓ N<sup>2</sup> connection: 8mm 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: 0-100 L/min

### Technical data heater SH 230-4

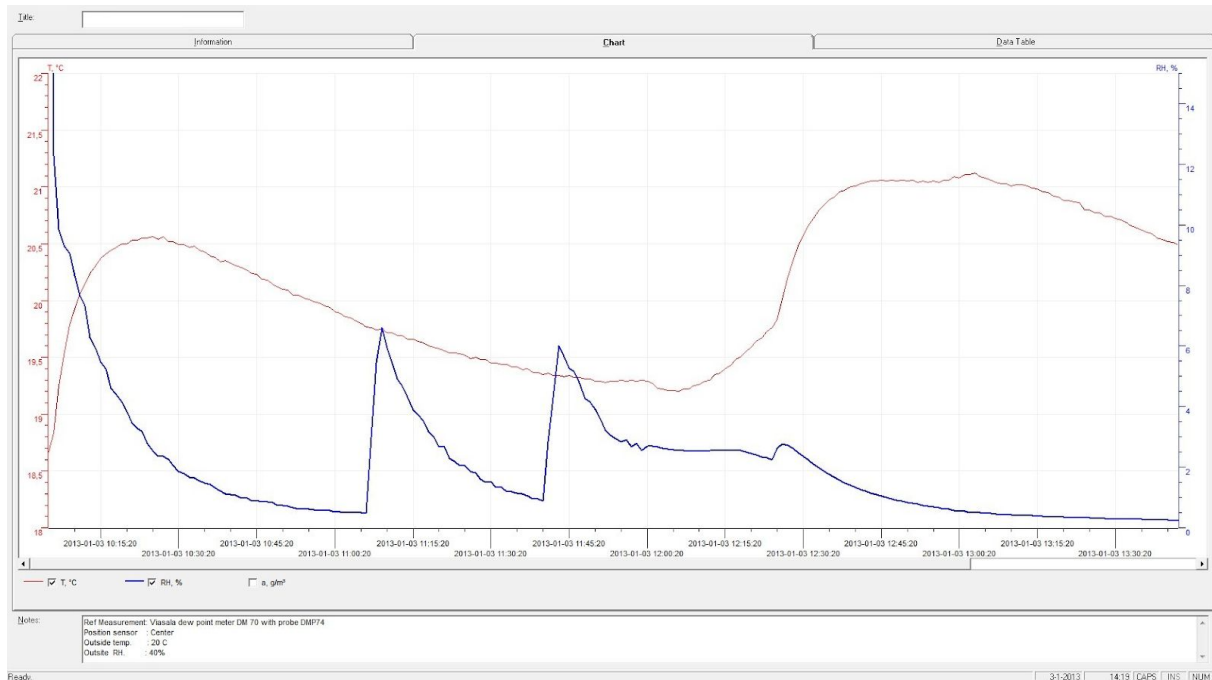
- ✓ Voltage: 230VAC/50Hz (120VAC/60Hz optional)
- ✓ Power: 780 W/h
- ✓ Temperature sensor: PTC 100
- ✓ Thermal protection: 90°C
- ✓ Temperature range: 30-40°C
- ✓ Airflow: 86 m<sup>3</sup>/h
- ✓ Display tolerance: 1 digit at 25°C

### Technical data dry-unit U-2000 series

- ✓ Control: Adjustable with control panel 1 series
- ✓ Voltage level: 230V/50Hz (120V/60Hz optional)
- ✓ Power consumption: 35 W/h
- ✓ Dimensions: W x L x D = 260mm x 380mm x 100mm
- ✓ Weight: 8.1 kg

# SD 1104-21

## Performance test



## Test conditions

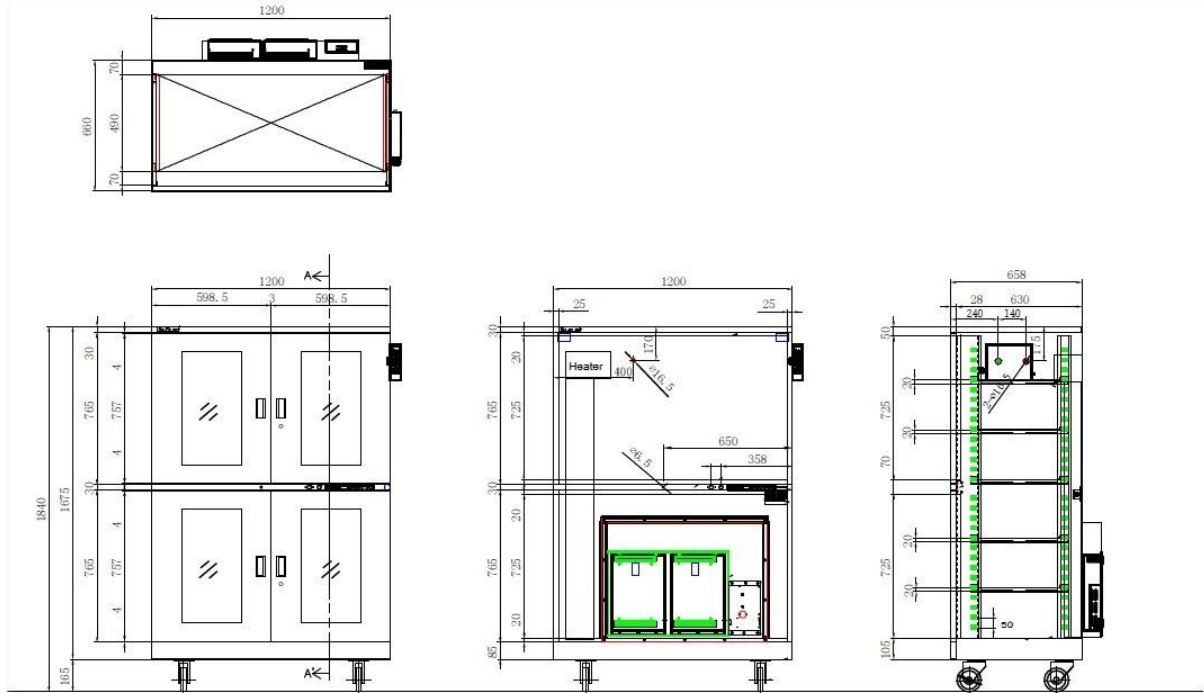
- ✓ Instrument: Vaisala
- ✓ Type of dew point sensor: Vaisala drycap 180M
- ✓ Accuracy of dew point sensor:  $\pm 0,2^{\circ} \text{C}$  at  $+ 20^{\circ} \text{C}$  ( $+ 68^{\circ} \text{F}$ )
- ✓ Location of sensor: In the direct surroundings of the cabinet sensor
- ✓ Ambient conditions: Hum.  $50 \pm 5\% \text{ rH}$ ,  $22^{\circ} \text{C} \pm 2^{\circ} \text{C}$ , Pressure  $994 \pm 20 \text{ hPa}$
- ✓ Door openings: 2 door openings, 15 sec.

For more detailed test results, please refer to our website.

# SD 1104-21

## Technical drawings

Dimensions mentioned in mm.



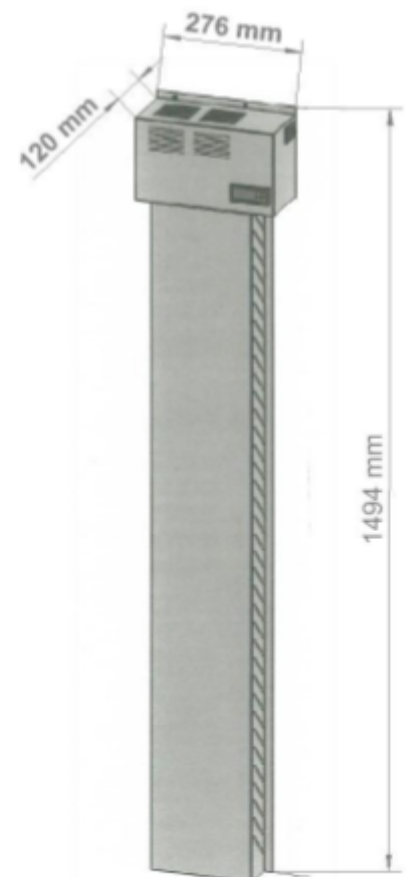
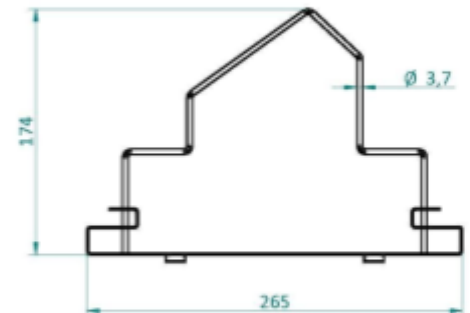
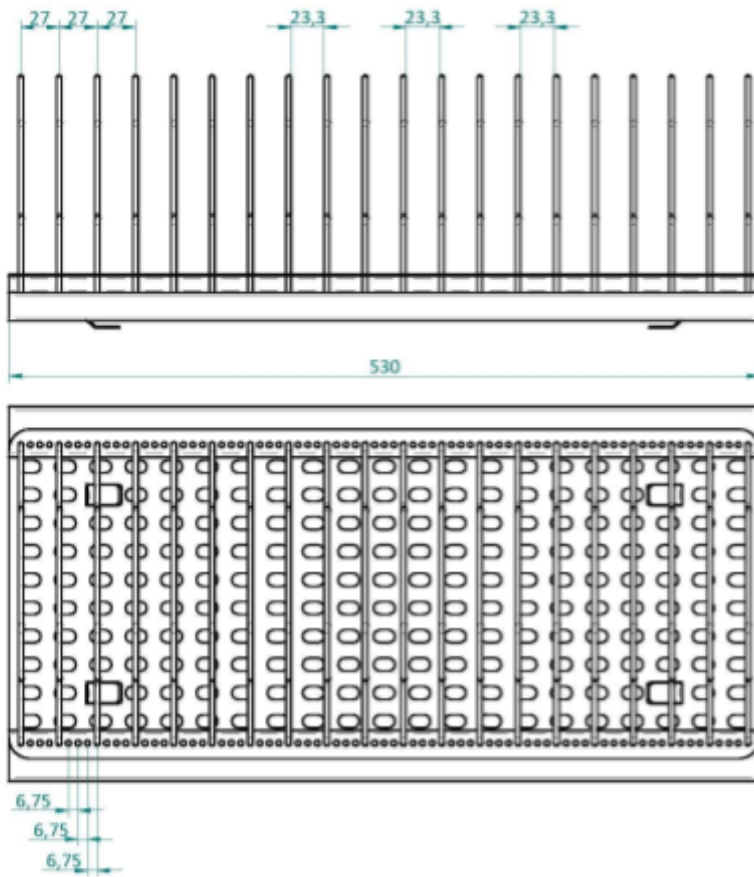
## Shelves

Number of shelves bottom section	2	3	4	5
Distance (in mm) between shelves if equally divided in bottom section	230	180	130	80
Remaining space between top shelf and middle beam	230	130	105	175
Remaining space between bottom shelf and bottom cabinet	225	175	75	125
Loading capacity shelves m <sup>2</sup> (1155 mm x 780 mm)	1.13	1.72	2.26	2.83

Number of shelves top section	2	3	4	5
Distance (in mm) between shelves if equally divided in bottom section (if bottom shelf is mounted at lowest possible position in top section)	330	230	180	130
Remaining space between top shelf and top beam	375	225	225	125
Remaining space between bottom shelf and middle beam	0	0	0	0
Loading capacity shelves m <sup>2</sup> (1155 mm x 780 mm)	1.13	1.72	2.26	2.83

## SD 1104-21

### Technical drawings





## SD 1104-21

### Options



#### N<sup>2</sup> auto flow system

The autoflow system is developed to 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 realised by using Nitrogen (N<sup>2</sup>), which is purged automatically after the doors are closed. (timer controlled)

*Item number 22613001*



#### N<sup>2</sup> flow system

The flow system is developed to 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 realised by using Nitrogen (N<sup>2</sup>). Adjustable 10 - 100 L/min.

*Item number 20010020*



#### SMD Reel Rack with reel support

700 mm length, ESD coated

*Item number 20014006*



#### SMD Reel supports

Reel support for SMD Reel Rack

*Item number 20014200*



#### Humidity calibrator Hygropalm 22

Precision measuring device for calibrating sensors.

Set including Hygroclip sensor, case and cable:

*Item number 20001019*

Hygropalm only:

*Item number 20001016*

## SD 1104-21

### Options



#### Humidity alarm light Red or Orange

*Item number 20016033*



#### Set main spare parts SD cabinet

Set includes the main spare parts of the SD cabinet: Dry-unit U-2000, Main PCB and Power Supply

*Item number 30006099*

#### Exchange set main spare parts SD cabinet

Same set as above, but now as exchange

*Item number 30006096*



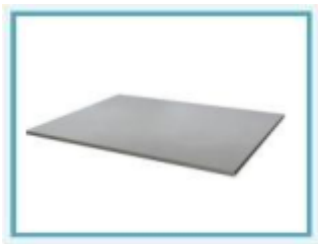
#### Shelf standard

For cabinets type 1104 1106

*Item number 20111409*

#### Brackets 2pcs

*Item number 20111709*



#### Shelf

For cabinets with 2 drying units

*Item number 20111609*

#### Brackets 2pcs

*Item number 20111709*



#### Heater SH 230-4

40°C heater

*Item number 21001001*



