

ESDA 402-21



Acrylic Cabinet



The ESDA Series is equipped with a patented drying unit U-2000. Engineered for medium to long term constant low humidity storage of <5 %RH.

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

Proven in use around the world, the unique design of the ESDA 402 is highly energy efficient, representing a significant cost advantage for our customers.

The ESDA version is produced ESD safe. The surfaces of the cabinet are not chargeable. Acrylic body $10^{-7} \Omega/\text{sq}$.

The ESDA 402-21 is ideal for the moisture proof and anti oxidation storage of wide ranging technologies and conforms with IPC/JEDEC J- Std 033C.



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Standard Features

✓ Accuracy of sensor RH% & T°C	+/- 3% RH, +/- 0,3°C
✓ ESD safe design	Surfaces of the cabinet are not chargeable Dissipative acrylic glazing (in- and outside 10 ⁷ Ohm/sq)
✓ Door alarm buzzer	Longer door openings are detected
✓ Lockable doors	2 doors locked with key
✓ Shelves	In height adjustable chrome steel shelves (5 pcs)
✓ 1 series digital display	Very convenient settings of RH%, temperature, alarm and calibration functions.
✓ Drying unit	U-2000 drying unit
✓ Pre mounted holes	For nitrogen unit
✓ Power supply	Power cord 5 meter with IEC plug

Benefits

✓ Datalogging	Through network with software and optional hardware
✓ Recovery time after door opening	<30 minutes to below 5% (by 1 door opening)
✓ Highly energy efficient	Average power consumption 35 W/h.
✓ Option availability	N ₂ auto flow, SMD reel racks, etc.
✓ IPC	According to IPC-JEDEC J-STD 033C & IPC-1601
✓ Clear polycarbonate body	Easy to look through
✓ Maintenance	The drying unit is maintenance free, easy to service

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Technical data cabinet

- ✓ External dimensions: (W x H x D) 574 x 1485(1690) x 517 mm
- ✓ Internal dimensions: (W x H x D) 560 x 1480 x 480 mm
- ✓ Weight: 60 kg
- ✓ Weight on shelf: 30 kg
- ✓ Max. loading capacity: 100 kg
- ✓ Frame: Aluminium, ESD coated
- ✓ Body: ESD-Polycarbonate $10^7 \Omega/\text{sq}$
- ✓ Shelves (WxD): 4 pcs long, 460 x 490 mm adjustable
1 pcs short, 460 x 380 mm adjustable
- ✓ Volume: 386 L (due to volume of drying unit)
- ✓ Electric supply: 230 VAC (120 VAC optional)
- ✓ Power consumption: Average 35 W/h
- ✓ Protection class: Class 1, hard grounded
- ✓ Humidity level cabinet: $\leq 2\%$ RH depending on amount of door openings

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

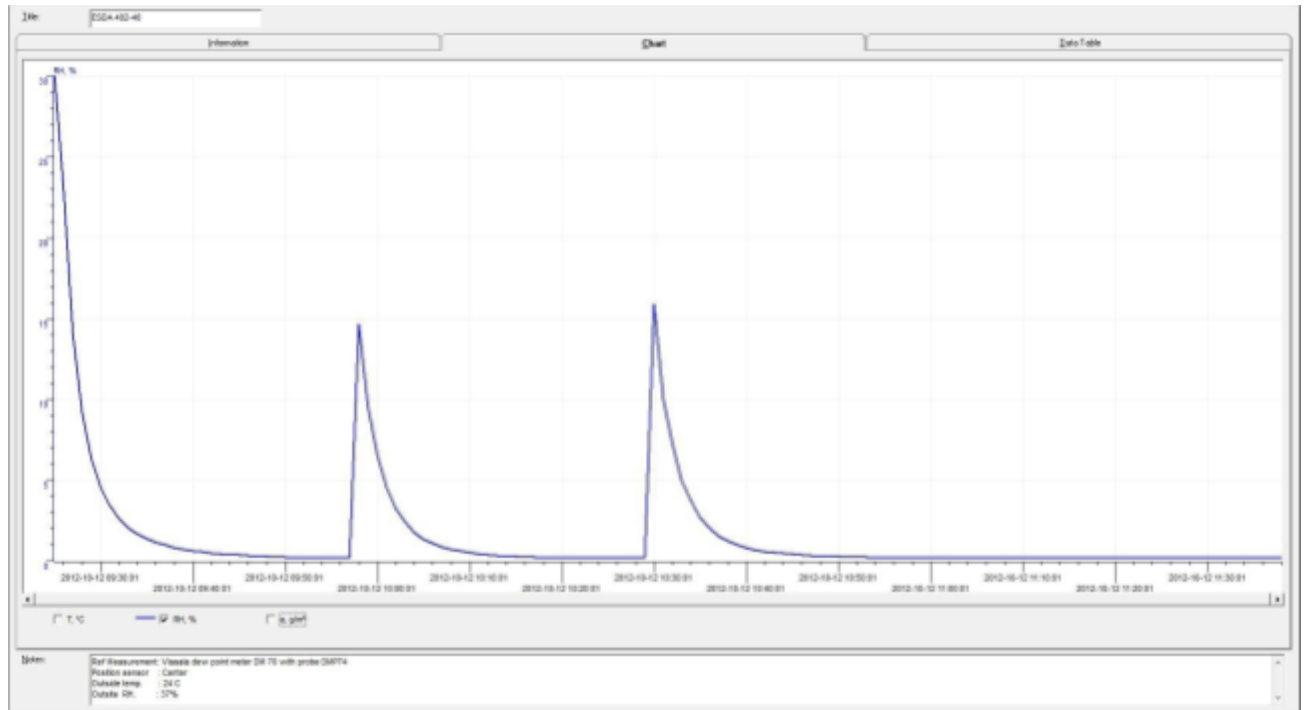
Technical data dry-unit U-2000 series

- ✓ Control: Adjustable with control panel type 1
- ✓ Dehumidifying Temperature: 10 – 40° C
- ✓ Electric supply: 230 VAC (120 VAC optional)
- ✓ Dimensions (L x B x H): 260 x 380 x 100 mm
- ✓ Weight: 8,1 kg

Technical data N² Auto Flow

- ✓ N² connection: 8mm hose connection
- ✓ N² pressure: 1 - 6 bar
- ✓ N² standby amount: 0 - 25 L/min
- ✓ N² purge: 0 - 25 L/min
- ✓ Purge time: 0 - 99 min

Performance test

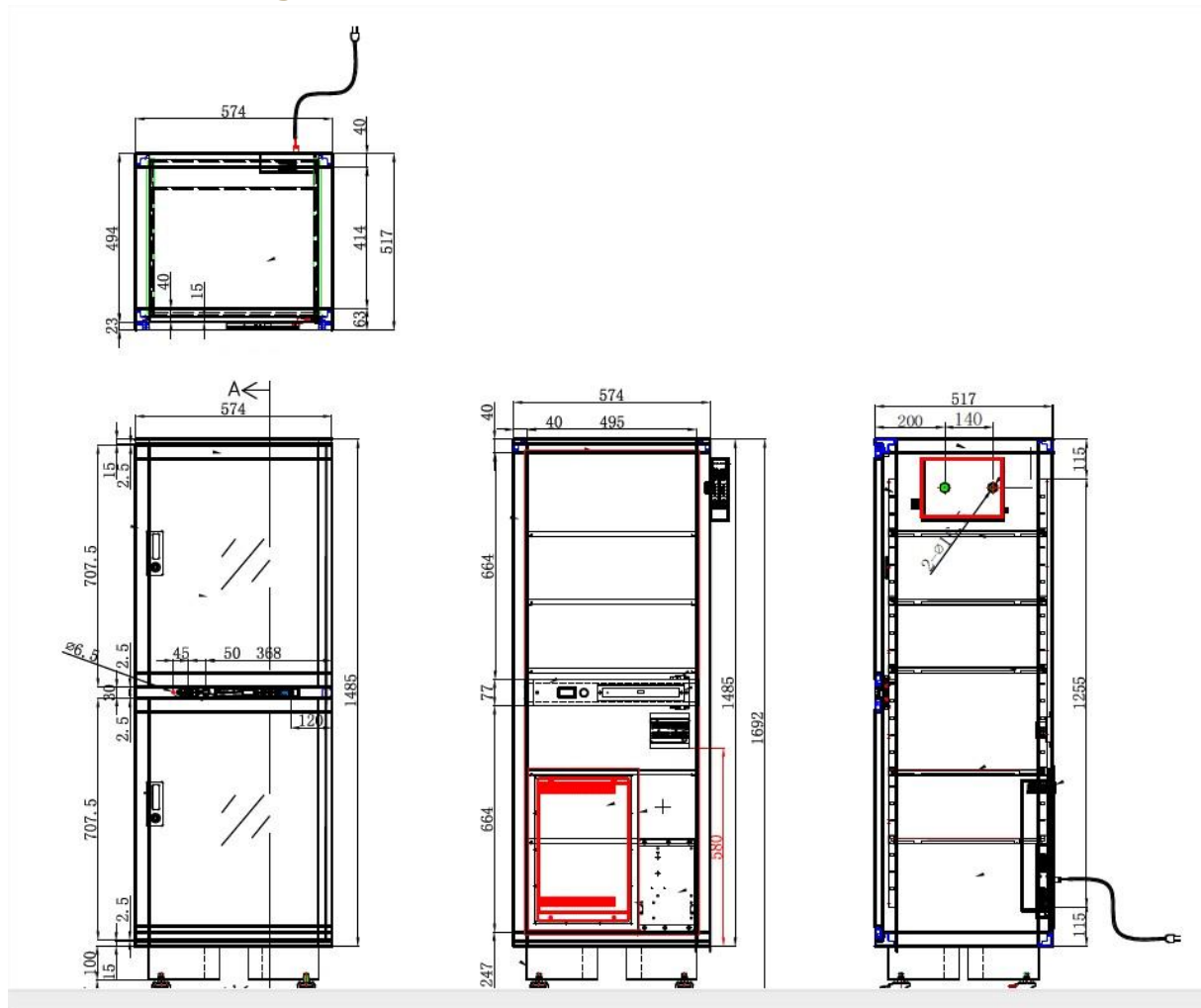


Test conditions

- ✓ 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. (average RH 0,70%)

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

Technical drawings



Dimensions mentioned in mm.

Maximum number of shelves mounted in the cabinet: 17 pcs long, 7 pcs short shelves.
Minimum space between the shelves: 35 mm.

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Options



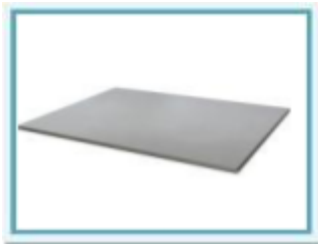
SMD Reel rack with reel supports
460 mm length.

Item number 20014000



Reel support
Additional reel supports for 20014000.

Item number 20014200



Shelf standard incl. brackets.
For cabinets type ESDA 201 & 402

Standard:
Item number 20100021
Short, when drying unit is mounted:
Item number 30010100



N² Auto Flow system
The N² 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 realized by using nitrogen. Adjustable 10 - 100 L/min.

Item number 22613001



Trolley
For easy transportation of the cabinet, 1 meter high

Only on request

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Options



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



Set main spare parts SD cabinet

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

Item number 30006099

Exchange set main spare parts SD cabinet:

Item number 30006096



SuperDry Data Logger

Highly accurate data logger with standard Ethernet interface. Compatible with the Free Totech Viewer and Totech Monitor.

Item number 47000582

V17.11