



Model: ESDA-400S

<3%RH, 400L



Totech (Toyo Living) is the creator of world's first Automatic Drying System invented in 1973.

Super Dry cabinets use the highly-quality and highly reliable Toyo Living engine and has been sold over 700,000 units and used in over 10,000 companies around the world. We also supply various kinds of custom-build cabinet to best suit our client's need.

#### Description

Developed out of robust acrylic material, the Totech ESDA Series is engineered to achieve <5%~50%RH control. Equipped with an N2 flow meter and the series can be used to store any stock commonly used in laboratories or electronics in a nitrogen atmosphere. Transparent acrylic cabinet serves clear observation of items stored inside, such as powder, chemicals, antiques, and so on.

#### Features

- ❖ Modular design: Totech Acrylic Cabinet is modularly designed dry cabinet. The main modules include dry unit, hygrometer, shelves, castors, humidity&temperature monitoring module. All of the modules can be replaced easily. Totech dry cabinet can be used as long as the cabinet structure is in good condition. Most of our customers can use the Totech dry cabinets for more than 10 years without any problem.
- ❖ Dry units: <3%RH
- ❖ Nitrogen flowmeter is equipment as standard.
- ❖ ESD safe design: Cabinet is with ESD painted acrylic body, aluminum frame, stainless steel shelves and ground wire, well comply with IEC 61340-5-1.
- ❖ Convenient Operation: Totech acrylic dry cabinet works automatically and continuously. Humidity is shown on hygrometer.
- ❖ Maintenance free design: Totech acrylic dry cabinet works by dry units. An interlocked fan causes the air to circulate through the dry unit, while passing through the dry unit moisture in the air is absorbed by the zeolite desiccant. During periodic regenerating of the zeolite desiccant by heating, the absorbed humidity is evaporated and exhausted through the external shutters of the dry unit. The process is physical, and no extra maintenance at all.
- ❖ Lockable doors: Every door can be locked separately with a key.

#### Applications

Totech Acrylic series is supplied with N2 flow meter, and can control humidity <5%RH dry unit is added and is ideal for moisture-proof and anti-oxidation storage applications, offering protection from corrosion, mold and deterioration.

ESDA-400S has an outstanding performance for drying moisture sensitive components and PCBs as a result of a high performance drying unit. Humidity can be controlled automatically to reach the lowest <3%RH. It is specially designed for moisture sensitive SMD packages to comply with IPC/JEDEC J-STD-033D. Transparent design, easy for observation, and light, easy to remove. Nitrogen purging is available.

60%~50%RH	Books, Antiques, Paper money, Fax machine, Mimeograph paper etc.
55%~40%RH	Cameras, Video cameras, Lenses, Microscopes, Magnifying glasses, Binoculars, Tapes, CDs, Recorder strips, Films, Positive/Negative films, Musical instruments, Stamps, Furs, Chinese herbal medicine, Tea, Coffee, Cigarettes etc.
45%~30%RH	Precision metal mould, Measuring instruments, Electronic parts, PCB boards, Metal powder, Semi-conductor, Medicine raw material etc.
<30%RH	Test specimen, Standard gauge, Seeds, Pollen, Napiform root etc.

#### Specifications

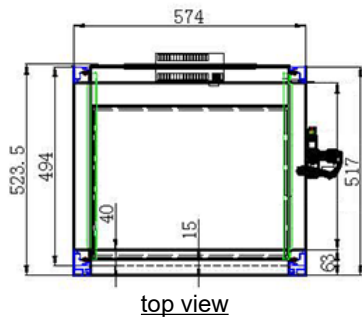
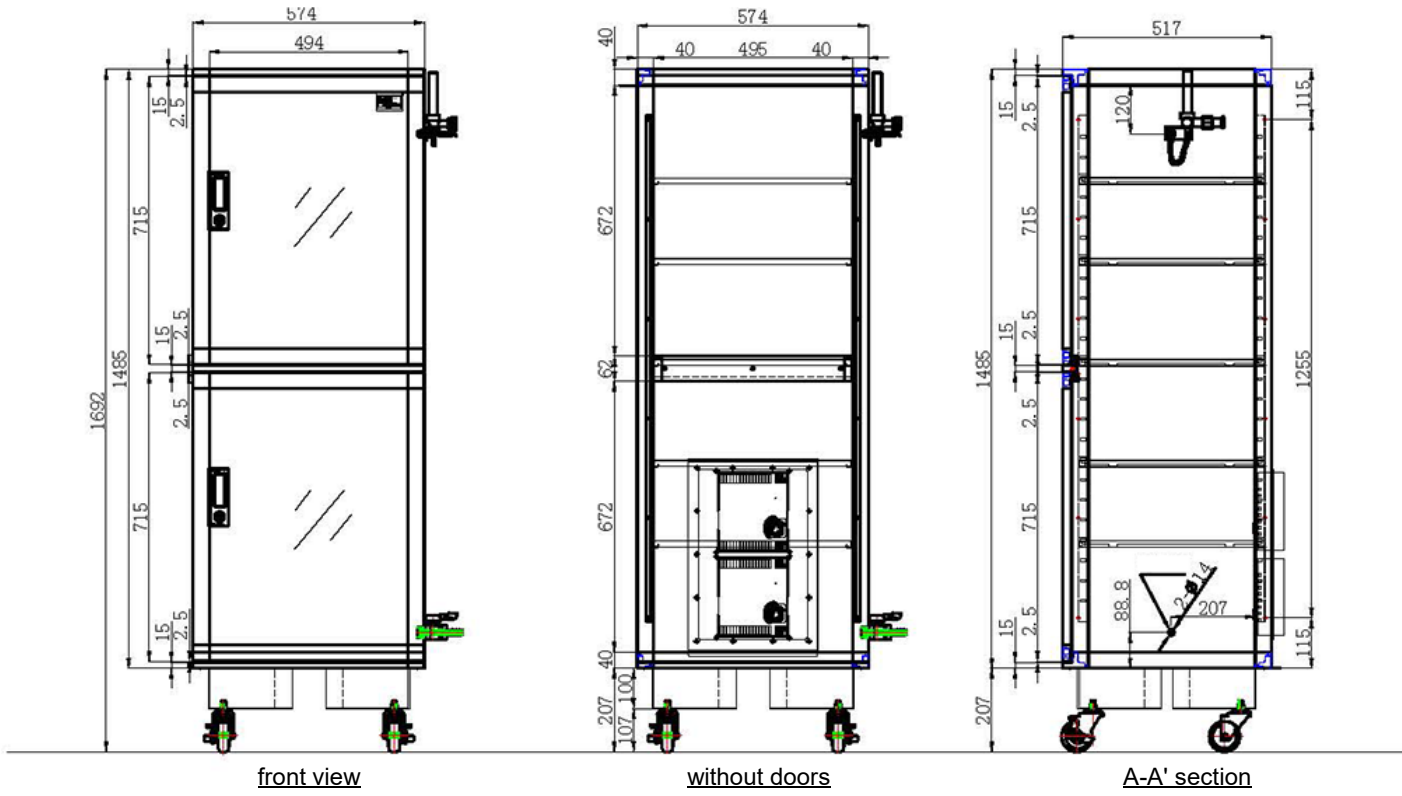
Humidity Range	<3%~50%RH
Hygrometer precision	± 3%RH
External dimensions	(W x H x D) 574 x 1692 x 606 mm
Internal dimensions	(W x H x D) 561 x 1470 x 487 mm
Weight	53 kg
Capacity	400 L
Shelves (W x D)	5 pcs, adjustable (stainless steel)
Max weight on shelf	20 kg
Structure	ESD safe acrylic body, aluminum frame
Door	2 pcs, with handles, airtight magnetic sealers
ESD grounding wire	1M Ω
Voltage	220 V AC (110 V AC optional)
Power consumption	Ave. 28W/h
Castors	4pcs, 2 of them with brakes





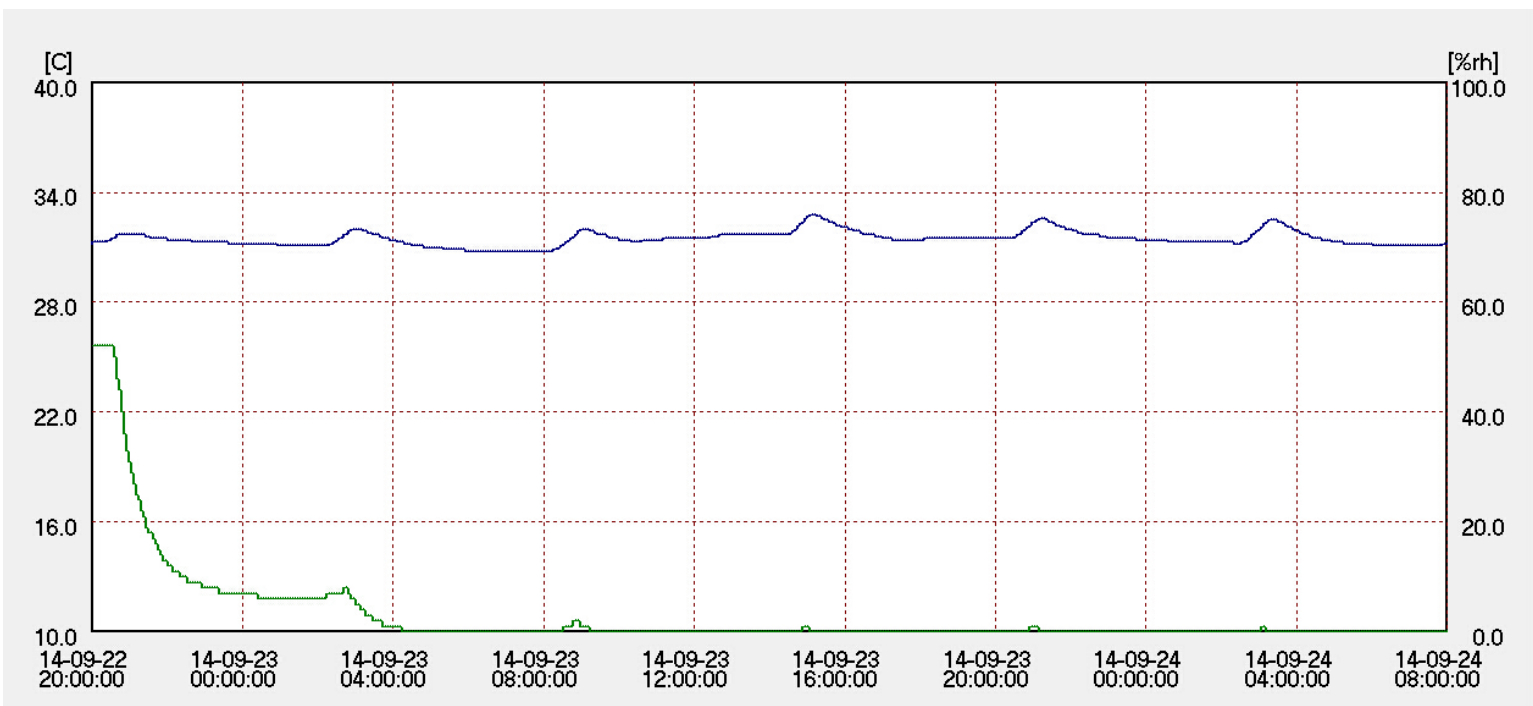
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- ❖ Customized models with different dimensions are AVAILABLE.
- ❖ The max.external dimensions can be made into W1700mm, D960mm, H2000mm.

Unloaded Test



- ❖ Condition: 2012.08.29 16:40 ~ 2012.08.31 08:00
- ❖ Instrument: CHINO Data logger, Model: MR6662. Accuracy rating:  $\pm 0.5^{\circ} \text{C}$ ,  $\pm 3\% \text{RH}$ .



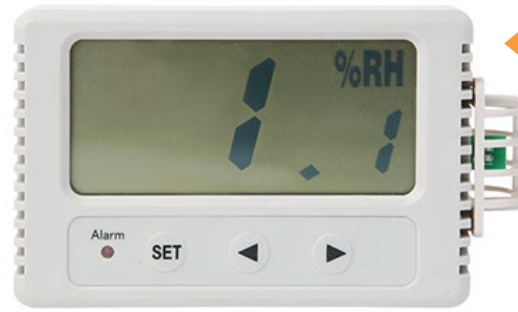


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Hygrometer

- ❖ Display the humidity value
- ❖ Can set humidity alarm



Available options



❖ Extra shelf

Greatly increase the usable space inside Super Dry



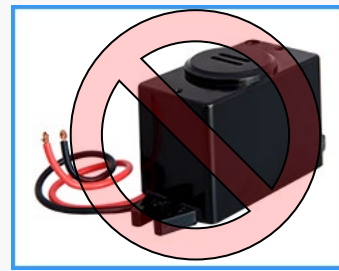
❖ SMD single rack (stainless steel)

Suitable for storage of components on tape and reel, can pull out on rail



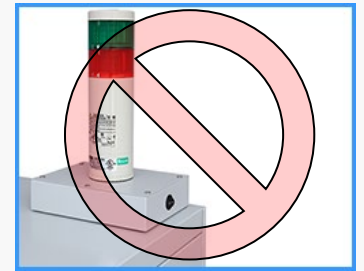
❖ SMD double rack (stainless steel)

Suitable for storage of components on tape and reel, can pull out on rail



❖ Humidity/ Door open alarm buzzer

Alarm buzzer sounds when its internal humidity/ door open time exceeds set value



❖ Humidity alarm light

Alarm light flashes and sounds when its internal humidity exceeds set value



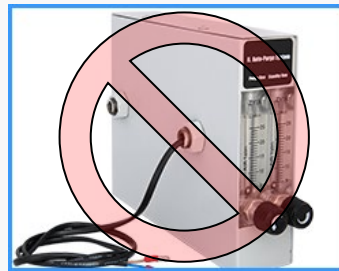
❖ Independent Nitrogen purge system (Model TN2-02)

Effective usage of N<sub>2</sub> combined with Super Dry, help to accelerate the recovery time and oxidation prevention. Set the buttons on N<sub>2</sub> purge system itself



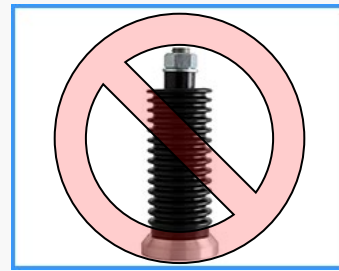
❖ Nitrogen valve (Model: HN2-01)

Simple N<sub>2</sub> flow meter 0-25L/min adjustable



❖ Nitrogen auto purge system (Model AN2-03)

Effective usage of N<sub>2</sub> combined with Super Dry, help to accelerate the recovery time and oxidation prevention. Set on digital control panel



❖ Adjustable legs

Available for effective stabilization



❖ Wrist strap connection

Allows grounding while handling ESD sensitive materials



❖ Data logger with software (model 174H)

Data logging humidity and temperature, can read and output data by software with a PC



❖ Castors(4 pcs)

To move the cabinet on floor easily

