



HUMIDITY AND TEMPERATURE CONTROL



LAB EQUIPMENT



ESD SAFE PRODUCTS



INTELLIGENT STORAGE



INDUSTRY & LAB

Facility, Equipment and Instrument

CATALOGUE 2023~2024



PIONEER OF ELECTRONIC DEHUMIDIFICATION

Toyo Living was established in Japan in the year 1974. As the earliest and largest electronic dry cabinet manufacturer in the world, its brand SUPER DRY keeps the global leading position in ultra-humidity control.

Totech Global is the sole official representative for Toyo Living's product in the overseas market. With guideline of high quality, excellent service and innovation, we commit ourselves to providing various products with creative technology and stable performance.



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PROFILE



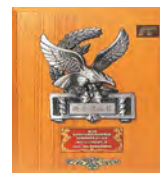
THE COMPANY

Totech Global is the sole official representative for Toyo Living's product in the overseas market. With guideline of high quality, excellent service and innovation, we commit ourselves to providing various products with creative technology and stable performance. And the main products cover ultra-low humidity storage cabinets, ovens, climate chambers, ESD safe products, smart storage equipment, RP protection system, etc.

Toyo Living was established in Japan in the year 1974. As the earliest and largest electronic dry cabinet manufacturer in the world, its brand SUPER DRY keeps the global leading position in ultra-humidity control, and it is used in more than 2000 customers in the field of semiconductor, IC, PCB, biochemistry, medicine, optical instrument, etc.



The Japanese government director general prize



Excellent enterprise prize of Japan

OUR SERVICES

- ✔ 49 Years' experience as Dry Cabinet pioneer maker.
- ✔ Over 5,000 companies and organizations users.
- ✔ The longest term service after-sales.

THE CLIENTS

Totech's SUPER DRY with Toyo Living's dry unit has been used by many major companies that demand high reliability and performance for Dry Cabinets with precise humidity control ability. NASA and JAXA had selected SUPER DRY in their laboratory and production line of most advanced aerospace technology.



INDEX

OUR PRODUCTS

Dry Cabinet List	Humidity	Application	Page
♦ MSD <small>Series</small> Low Humidity+Baking	<1%RH Max.(60 °C)	Most suitable for components requiring baking. Components exceeding floor life, taping components, LED, plastic material and flexible printed circuit (FPC).	P.3
♦ FSD <small>Series</small>	<0.5%RH	Newly developed. Super Dry FSD-Series is the high end series specially designed for production line with fast dehumidifying speed, especially for recovery after door-open-close.	P.5
♦ SDU <small>Series</small>	<0.5%RH	Super Fast Dehumidifying.	P.6
♦ 01 <small>Series</small>	<1%RH	Ultra low humidity storage for most strict quality requirement. Suit for plant use with frequent door opening and storage for massive items.	P.8
♦ Feeder <small>Series</small> Storage for feeders			P.9
♦ SDC <small>Series</small> Low Humidity+Clean	<2%RH	Components and PCB assembling. Chemicals, medicines and foods. Physical chemistry components.	P.9
♦ 02 <small>Series</small>			P.10
♦ SUS <small>Series</small> Stainless Steel			P.11
♦ 03 <small>Series</small>	<3%RH	High cost performance.	P.12
♦ 20 <small>Series</small>	<20%RH	Low cost, fit for medium/long term storage.	P.12
♦ Acrylic <small>Series</small>	3 or 20%RH	Transparent nitrogen cabinet.	P.13
More Products			Page
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MSD-1106-02A *Ultra low humidity*

Baking temperature : Max. 60°C



MSD-1106-02A

MSD-480-02A *Ultra low humidity*

Baking temperature : Max. 60°C



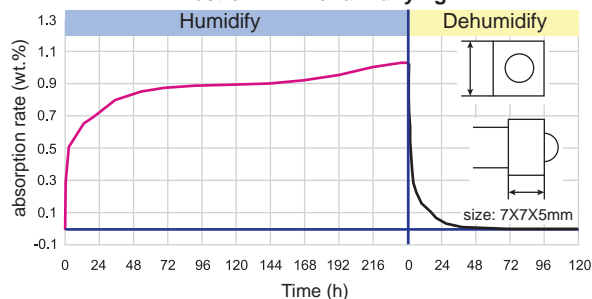
MSD-480-02A

Why Choose MSD Series?

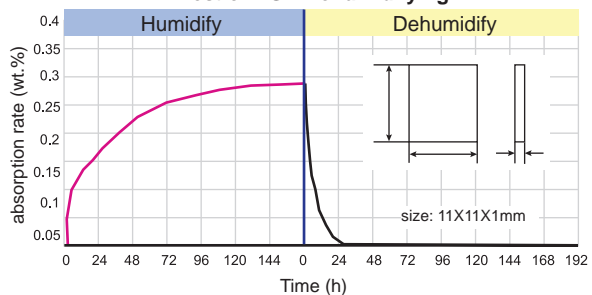
Super Dry MSD series is added the function of medium temperature baking. The heater and dry unit work together to speed the drying, the humidity can reach <1%RH, which can meet the requirement of IPC/JEDEC J-STD-033D. Medium temperature baking can also avoid the oxidation caused in the traditional high temperature baking.

NEW

Test of LED Dehumidifying

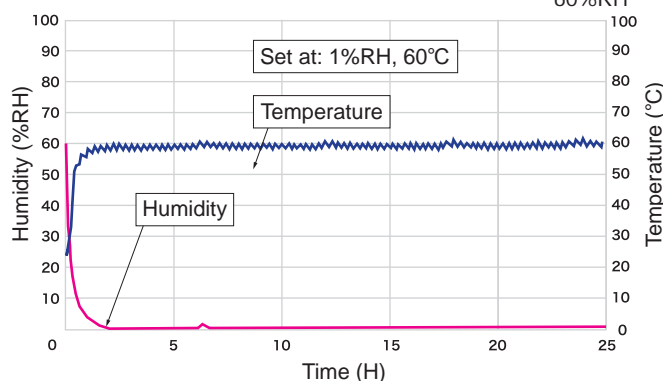


Test of BGA Dehumidifying



MSD-1106-02A Unloaded Test

Environment: 25°C
60%RH



※Humidify under 30°C and 80%RH to be saturated,
and then dehumidify under MSD under 60°C and 1%RH

Model	MSD-1106-02A	MSD-702-02A	MSD-480-02A
Min. Humidity	<1%RH		
Max. Temperature	60°C		
External Size W·H·D (mm)	1200X1861X764 mm	600X1803X764	600X1262X764
Internal Size W·H·D (mm)	1100X1510X550 mm	500X1510X550	500X970X550
Volume (L)	1041	481	266
Weight (kg)	289	174	126
Sensor precision	±2%RH, ±1°C		
Voltage	AC220V 50/60Hz		
Structure	Double layer steel body with isolation		
Shelves (adjustable)	5		3
Max. Weight On Shelf(Kg)	100		
Door	6	3	2

Benefits of storage treatment

➡ Cutting pre-baking

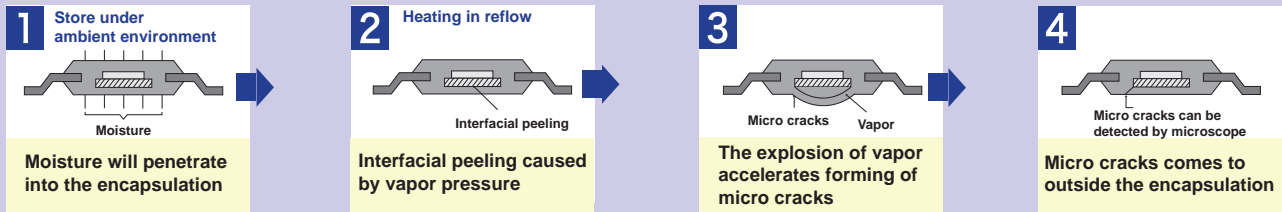
Completely eliminating pre-baking with thermal stress, achieving zero visible and latent defects.

➡ Medium-temperature baking

Can also be used for the purpose of reducing the moisture absorption rate of storage items. As it operates at a moderate temperature, it does not damage SMD components during the dehydration process.

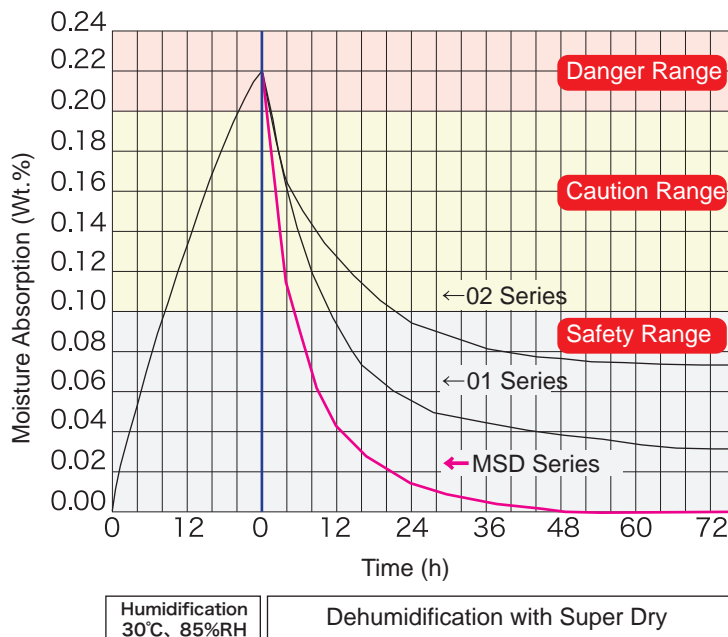
Performance Data/ Great Effect In Preventing Micro Cracks And Interlayer Peeling

How Micro Crack Happens On IC Encapsulation



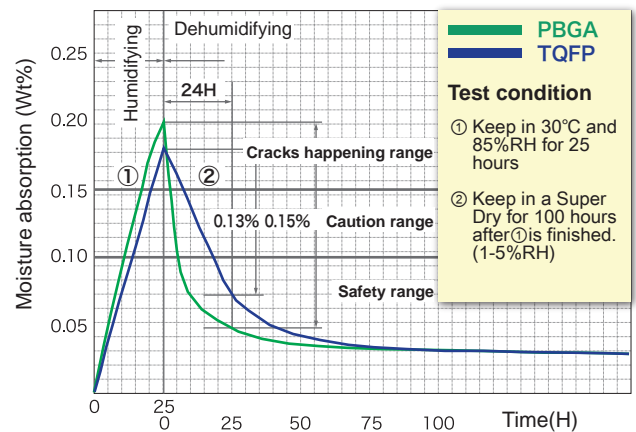
※ The micro cracks have been reduced due to the improvement for the material and its strength for IC encapsulation, but it still can't be eradicated.

Performance Test for Super Dry with Different Series

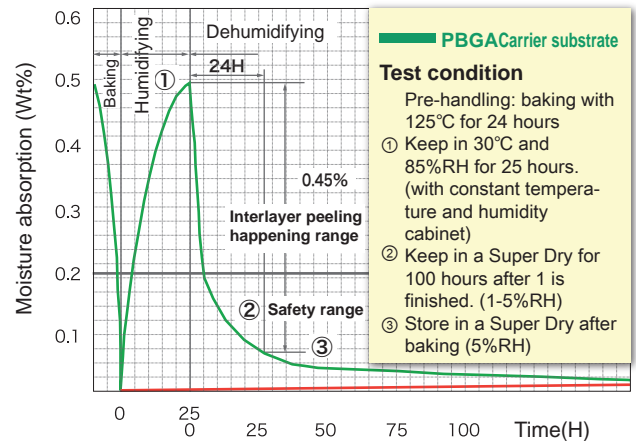


The above chart shows the changes of moisture absorption for the stored components, which are pre-baked under 150°C for 10 hours, then dehumidify them forcibly, and dry them with different series of Super Dry.

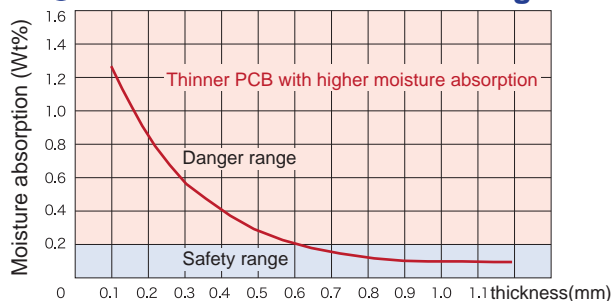
(Humidifying and dehumidifying data for IC encapsulation)



(Humidifying and dehumidifying data for multilayer PCB)



① Problems In Reflow Soldering



The relationship between thickness of PCB and moisture absorption (24 hours. Ambient temperature: 30°C Ambient humidity: 85%RH)

② IC Encapsulation

MSL	Floor life of the vacuum IC encapsulation after unpacked	
1	≤30°C/85%RH, unlimited floor life	
2	1Year	
2a	4Weeks	microcracks happen exceeding this time
3	168Hours	
4	72Hours	
5	48Hours	
5a	24Hours	
6	Must bake before use	

DIP • PGA
(in-line package)

SOP • TSOP
QFP • BGA
CSP • FC
(quad flat package)

• No need to consider floor life if the IC encapsulation are kept in Super Dry, and no need of baking of MSL is within 5a.

FSD-1106-01

Ultra low humidity
Super fast dehumidification

Newly Developed Super Fast Dehumidifying

FSD-680-01

Ultra low humidity
Super fast dehumidification

Newly Developed Super Fast Dehumidifying

These highly reliable patented products are 2 year guarantee.

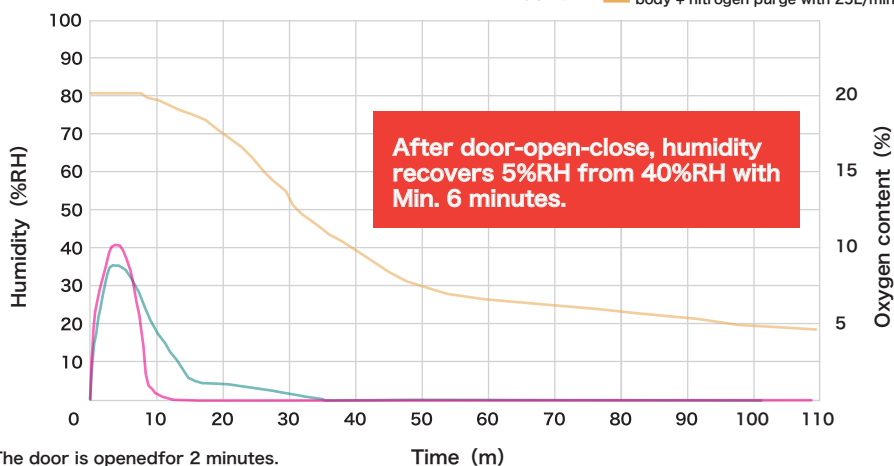
- ◆ Installed Switzerland made SENSIRION sensor, with display range 0~99%RH.
- ◆ To read humidity&temperature value, set humidity alarm and calibrate sensor on digital panel.
- ◆ Cabinet body is made of 1.2mm SPCC, with trengthened structure and excellent air tightness.
- ◆ 360°rotary castors with brakes, ESD safe castors optional.
- ◆ Shelf is with loading capacity 100kg, with height adjustable.
- ◆ Cabinet surface resistance 10^6 ~ $10^9 \Omega$, cabinet is with $1M\Omega$ grounding wire, compling to IEC61340-5-1.
- ◆ The storage efficacy satisfies and exceeds the IPC/JEDECJ-STD-033D standard.



FSD-680-01

Door-open-close test (unloaded)

Environment: 25 °C
60 %RH



Drying speed is far faster than that of nitrogen or compressed air with flow rate 25L/min.



FSD-1106-01

Model	FSD-680-01	FSD-1106-01
Series	Ultra low humidity, Super fast dehumidification	
External Size	W600*D670*H1785mm	W1200*D670*H1840mm
Internal Size	W555*D490*H1545mm	W1157*D490*H1545mm
Min. Humidity	0.5%RH	
Humidity Accuracy	±2%RH	
Surface Resistivity	10^6 ~ $10^9 \Omega$	
Volume (L)	580L	1160L
Power Consumption	103.4W/hr	193.1W/hr
Shelves (Adjustable)	5PCS	
Weight (kg)	132Kgs	266Kgs
Max. Weight On Shelf(Kg)	100Kgs	
Color	Off-white	

Ultra low humidity Dewpoint T : -43°C Ambient environment: 50%RH, 23°C

SDU-1206-00 SDU-1204-00

- ◆ Totech Super Dry Ultra series launched with newly japan made dry unit u-2005f
- ◆ It can keep $\leq 0.5\%RH$ within 100 hours without door opening
- ◆ It is enough for dry storage of MSL 5a components with frequent door opening



SDU-1206-00



SDU-1204-00

(Refer to IPC/JEDEC J-STD-033C)

Floor life can be regarded as 0 for IC package stored in low humidity dry cabinet

Component storage cabinet
SUPER DRY

Unpack dry bag

Remainder components after unpacking

Components stored inside Super Dry after the MBB is opened

Remainder components to be assembled (reel, tray etc.)

Components within floor life

Assembling Processes



Floor life can be reset by storing in a dry cabinet for specified time as per components storage conditions, such as time, etc.

Testing process

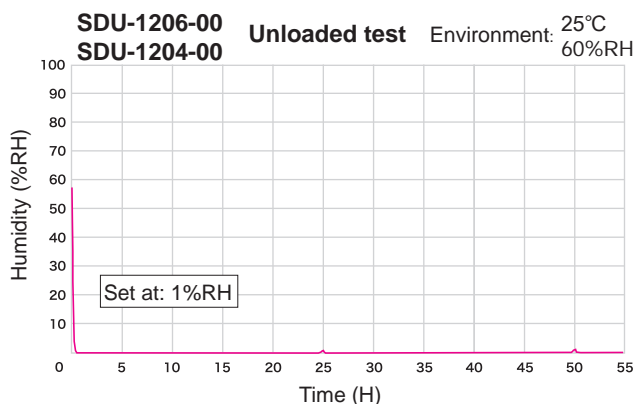
NG Unqualified assembled substrate
SUPER DRY



Reworking

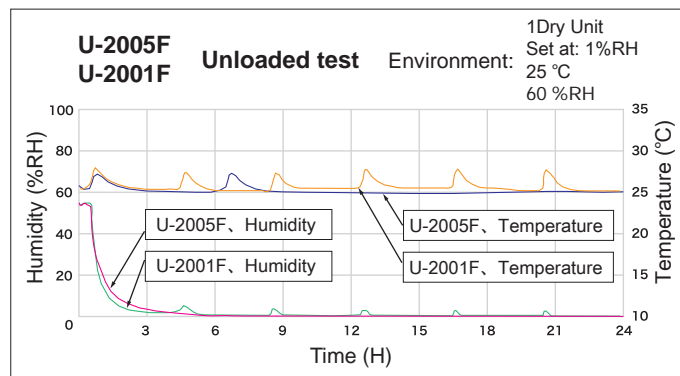
For assembling process

OK Qualified (Temporary storage)
SUPER DRY



※ Due to continuous product improvement, some of the specifications may change

Model	SDU-1206-00	SDU-1204-00
Min. Humidity	<0.5%RH	
External Size W-H-D (mm)	1200 x 1840 x 670	
Internal Size W-H-D (mm)	1190 x 1560 x 620	
Volume (L)	1160	
Weight (kg)	167	
Voltage	AC220V (AC110V optional) 50/60Hz	
Power Consumption	Mean 56W/h	
Structure	Steel with ESD safe paint	
Shelves (adjustable)	5	
Max Weight On Shelf(Kg)	100	
Door	6	4



SUPER DRY SDU Series

Min. Humidity: **<0.5%RH**

Customizable

Ultra-fast Dehumidification



Ultra low humidity **Dewpoint T : -43°C** Ambient environment: 50%RH, 23°C

SDU-702-00 SDU-502-00



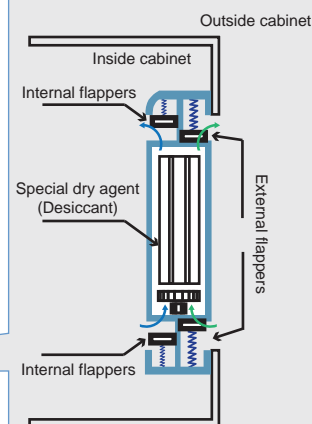
SDU-702-00

Dry Unit includes desiccant, cycling fans and controlling modules. After the desiccant is saturated, dry unit will start to regenerate by heating, and the moisture will be discharged to outside cabinet as vapor. The whole process is physical and there is no need of replacement of desiccant.



SDU-502-00

Dry Unit U-2005F



MADE IN JAPAN

Ultra low humidity **Dewpoint T : -43°C** Ambient environment: 50%RH, 23°C

SDU-302-00 SDU-252-00



SDU-302-00



SDU-252-00



- ① Power ON / OFF
- ② Display switch for humidity and temperature
- ③ Adjust the humidity level
- ④ Recycle lights will keep on when dry units are regenerating
- ⑤ Alarm light will turn on when the cabinet humidity exceeds the alarm value

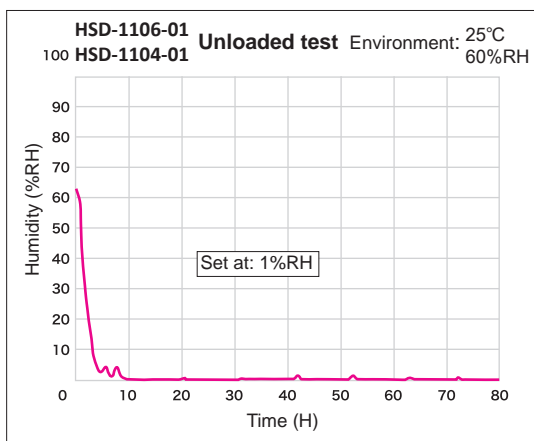
※ Due to continuous product improvement, some of the specifications may change

Model	SDU-702-00	SDU-502-00	SDU-302-00	SDU-252-00
Min. Humidity	<0.5%RH			
External Size W-H-D (mm)	620X1840X780	880X900X740	500X1230X640	880X900X380
Internal Size W-H-D (mm)	610X1560X730	870X830X690	490X1160X590	870X830X330
Volume (L)	680	510	340	252
Weight (kg)	118	67	67	46
Voltage	AC220V (AC110V optional) 50/60Hz			
Power Consumption	Mean 56W/h			
Structure	Steel with ESD safe paint			
Shelves (adjustable)	5	3	7	3
Max Weight On Shelf(Kg)	100	50		
Door	2			

Ultra low humidity Dewpoint T : -35°C Ambient environment: 50%RH, 23°C

HSD-1106-01

All Six Models

HSD-1106-01


Operation Cost

Suppose dry cabinet is with 1000L and required humidity is 5%RH, and the cost of electricity is \$0.15/KWh, N₂ is \$0.95/m³ with flow rate 5L/min (0.3m³/h) to realize fast speed.

N₂ Purge

\$0.95*0.3m³/h*24h*30d*12m=
\$2462/Year



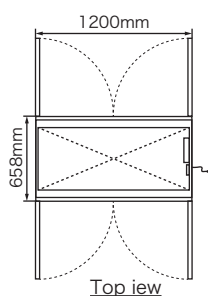
SUPER DRY

\$0.15*0.028KW/h*24h*30d*12m=
\$36/Year

SDP-1208-01 Ultra low humidity

PassBox Type

- ◆ Materials can be loaded/unloaded from both sides to improve work efficiency.
- ◆ Automatic operation and can reach min. <1%RH.
- ◆ Most suitable for material storage in warehouse.



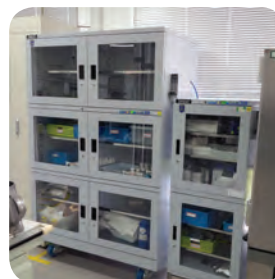
※ Super Dry is available to be made to pass box design

※ Due to continuous product improvement, some of the specifications may change

Model	HSD-1106-01	HSD-1104-01	HSD-702-01	HSD-502-01	HSD-302-01	HSD-252-01
Min. Humidity	<1%RH					
External Size W-H-D (mm)	1200X1840X658		620X1840X780	880X900X740	500X1230X640	880X900X380
Internal Size W-H-D (mm)	1190X1560X620		610X1560X730	870X830X690	490X1160X590	870X830X330
Volume (L)	1160		680	510	340	252
Weight (kg)	167	162	117	67	67	46
Power Consumption	Mean 56W/h					
Voltage	AC220V (AC110V optional) 50/60Hz					
Structure	Steel with ESD safe paint					
Shelves (Adjustable)	5			3	7	3
Max. Weight On Shelf(Kg)	100				50	
Door	6	4		2		

Application


Office Finished product

Warehouse

Lab Chemical reagent

Workshop Semiconductor materials

SUPER DRY Feeder Series

Min. humidity: <1%RH



SUPER DRY SDC Series

Min. Humidity: <2%RH



SDF-1402-01 Ultra low humidity

Deep Design Handles Tape Feeders

Most suitable for trolleys with feeder to put inside cabinet directly, cabinet loading capacity 200kgs. Two trolleys can be stored inside



SDF-1402-01



Tape feeder can be stored directly inside dry cabinet

SDC-1204-02 Ultra low humidity

Air Cleanliness Class 100

Can be used as small clean cabinet



SDC series filter the air by forced convection, and cabinet inner cleanliness is recovered in several minutes after Door-open-close

SDC-1204-02 (4 Doors) ※SDC-1206-02 (6 Doors)

SDF-1104-01 Ultra low humidity

Deep Design Handles Tape Feeders



(Storage example)



SDF-1104-01 (4 Doors) ※SDF-1106-01 (6 Doors)

SUPER DRY Application Example

- Molding area** ♦ In plastic molding, the sealant epoxy resin is kept in Super Dry to avoid moisture.
 - ♦ Precision molds is stored in Super Dry to avoid rusting. (needs no rust preventing oil, higher storage and use efficiency)
- Medical area** ♦ Though blood needs to be kept cold, it is with very effective to keep in Super Dry.
 - ♦ Super Dry suit for the dry storage of powder medicine for quality keeping (Discharge moisture) etc.
- Biology area** ♦ Germination percentage and growth properties of seeds is related with the low humidity storage of the seeds.
 - ♦ To improve the germination percentage and growth properties of seeds.

※ Due to continuous product improvement, some of the specifications may change

Model	SDF-1402-01	SDF-1106-01	SDF-1104-01	SDC-1206-02	SDC-1204-02
Min. Humidity	<1%RH			<2%RH	
External Size W·H·D (mm)	1300X1290X1090	1200X1840X960		1200X1840X800	
Internal Size W·H·D (mm)	1250X1205X952	1190X1560X910		1198X1569X629	
Volume (L)	1400	1708		1195	
Weight (kg)	200	197		198	
Power Consumption	Mean 56W/h			Mean 65W/h	
Voltage	AC220V (AC110V optional) 50/60Hz				
Structure	Steel with ESD safe paint				
Shelves (Adjustable)	N/A	5			
Max. Weight On Shelf(Kg)	N/A	100			
Door	2	6	4	6	4

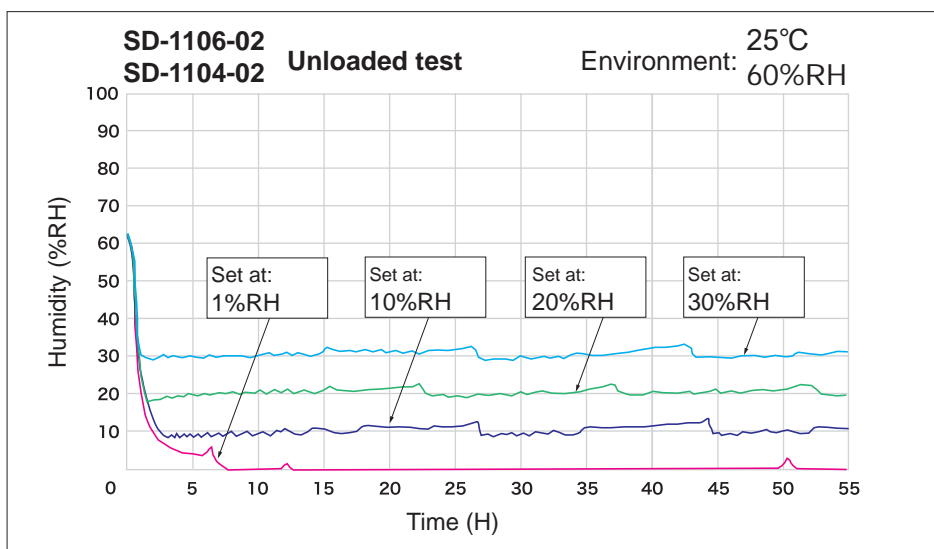
Ultra low humidity SD-1106-02

Dewpoint T : -28°C Ambient environment: 50%RH, 23°C

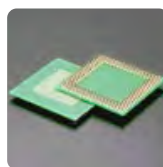
All 7 Models



SD-1106-02



Applications in production process



1 IC packages

- ♦ Ultra-low humidity storage and handling of unsealed CSP, BGA, QFP etc
- ♦ Ultra-low humidity storage of PLD during the programming process



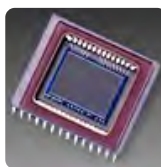
4 Ceramics

- ♦ Ceramic Board, Ceramics Condenser and other Ceramics-related materials



2 PCBs

- ♦ Dehumidification and moisture-proofing of Organic Thin Layered Boards, Printed Wiring Boards
- ♦ Ultra-low humidity handling of Pattern Film



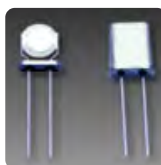
5 Optical Fiber, CCD etc

- ♦ Ultra-low humidity storage of micro-lens
- ♦ Long term dehumidification and moisture-proof storage of devices which are not suitable for high temperature aking



3 Silicon Wafer

- ♦ Anti-oxidation
- ♦ High quality control with dust-proofing



6 Crystal Resonator

- ♦ Ultra-low humidity storage of Crystals, Electrode Materials and Binding Materials

※ Due to continuous product improvement, some of the specifications may change

Model	SD-1106-02	SD-1104-02	SD-702-02	SD-302-02	SD-502-02	SD-252-02	SD-151-02
Min. Humidity	<2%RH						
External Size W·H·D (mm)	1200X1840X658		620X1840X780	500X1230X640	880X900X740	880X900X380	500X630X580
Internal Size W·H·D (mm)	1190X1560X620		610X1560X730	490X1160X590	870X830X690	870X830X330	490X560X530
Volume (L)	1160		680	340	510	252	145
Weight (kg)	167	155	110	60	60	39	29
Power Consumption	Mean 28W/h						
Voltage	AC220V (AC110V optional) 50/60Hz						
Structure	Steel with ESD safe paint						
Shelves (Adjustable)	5			7	3		
Max. Weight On Shelf(Kg)	100			50			
Door	6	4	2				1

SUPER DRY

SUS Series

Min. Humidity: <2%RH

Customizable

Fast Dehumidification



Stainless Steel Cabinet

SUS-1106-02 SUS-702-02 SUS-480-02



SUS-1106-02



SUS-702-02



SUS-480-02

Cabinet body made of 1.2 mm thick stainless steel SUS304, most suitable for ultra low humidity storage in clean rooms

5 Methods For 100% Perfect EPA!

- ◆ Stainless steel body
- ◆ Stainless steel shelves
- ◆ Conductive windows
- ◆ 1MΩearth resistance wire
- ◆ Earth point for wrist strap

AUTO DRY

Series

Min. Humidity: <20%RH

Customizable

Fast Dehumidification

Auto Dry flexible setting 20%~50%RH

ASD-1106 ED-508

All 4 Models



ASD-1106



ED-508

Storage of Metal Objects and Tools
Recommended: Lower than 40%RH



Seeds
Recommended: Lower than 50%RH



Powders
Recommended: Lower than 40%RH



Camera Lenses
Recommended: Lower than 50%RH



Stamps, Photos, Albums
Recommended: 30%~50%RH



Antiques, Arts
Recommended: Lower than 50%RH



※ Due to continuous product improvement, some of the specifications may change

Model	SUS-1106-02	SUS-702-02	SUS-480-02	ASD-1106	ED-508	ED-268	ED-138
Min. Humidity	<2%RH						
External Size W·H·D (mm)	1200X1840X658	620X1840X780	600X1225X760	1200X1840X690	880X900X760	880X900X400	440X900X400
Internal Size W·H·D (mm)	1190X1560X620	610X1560X730	589X1035X620	1190X1560X620	870X840X700	870X840X340	420X840X290
Volume (L)	1160	680	388	1160	510	252	121
Weight (kg)	167	100	120	155	58	33	21
Voltage	AC220V (AC110V optional) 50/60Hz						
Structure	Stainless Steel Body and Shelves, Conductive Doors			Steel			
Shelves (Adjustable)	5		3	5	3		
Max. Weight On Shelf(Kg)	100		50	100	50		
Door	6		2	6	2		1

SUPER DRY 03 Series

Min. Humidity: <3%RH



Fast
Dehumidification
Customizable

SUPER DRY 20 Series

Min. Humidity: <20%RH

Fast
Dehumidification
Customizable

CSD-1106-03

CSD-702-03

CSD-302-03

All 6 Models

CSD-502-20

CSD-1106-20

All 6 Models



CSD-1106-03



CSD-702-03



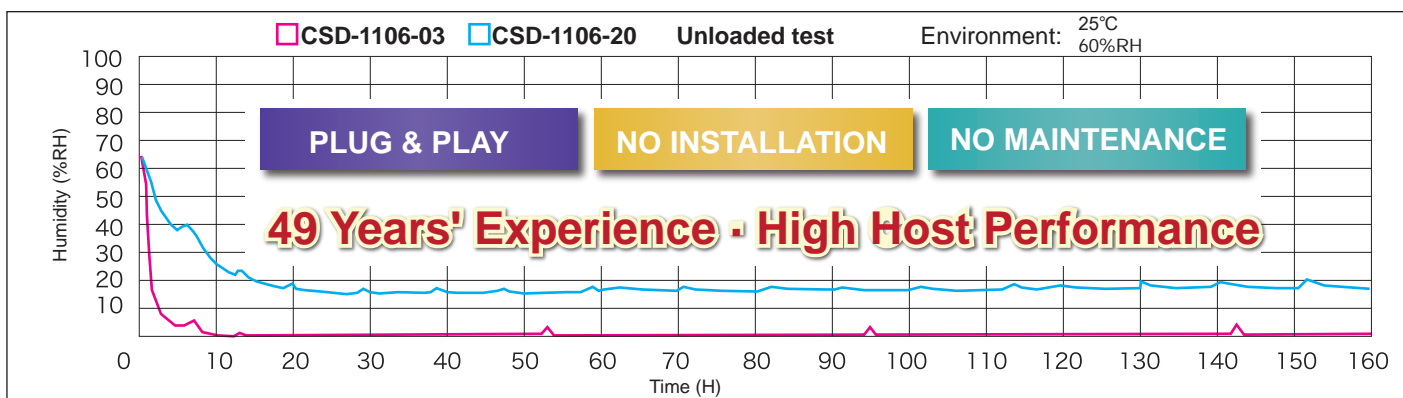
CSD-302-03



CSD-502-20



CSD-1106-20



※ Due to continuous product improvement, some of the specifications may change

Model	CSD-1106-03	CSD-1104-03	CSD-702-03	CSD-302-03	CSD-502-03	CSD-252-03	CSD-151-03
Min. Humidity	<3%RH						
External Size W·H·D (mm)	1200X1840X658		620X1840X780	500X1230X640	880X900X740	880X900X380	500X630X580
Internal Size W·H·D (mm)	1190X1560X620		610X1560X730	490X1160X590	870X830X690	870X830X330	490X560X530
Volume (L)	1160		680	340	510	252	145
Weight (kg)	167	155	110	60	60	39	29
Voltage	AC220V (AC110V optional) 50/60Hz						
Power Consumption	Mean 28W/h						
Structure	Steel with ESD safe paint						
Shelves (Adjustable)	5		7		3		
Max. Weight On Shelf(Kg)	100		50		50		
Door	6	4	2				1

Model	CSD-1106-20	CSD-1104-20	CSD-702-20	CSD-302-20	CSD-502-20	CSD-252-20	CSD-151-20
Min. Humidity	<20%RH						
External Size W·H·D (mm)	1200X1840X658		620X1840X780	500X1230X640	880X900X740	880X900X380	500X630X580
Internal Size W·H·D (mm)	1190X1560X620		610X1560X730	490X1160X590	870X830X690	870X830X330	490X560X530
Volume (L)	1160		680	340	510	252	145
Weight (kg)	167	155	110	60	60	39	29
Voltage	AC220V (AC110V optional) 50/60Hz						
Structure	Steel						
Shelves (Adjustable)	5		7		3		
Max. Weight On Shelf(Kg)	100		50		50		
Door	6	4	2				1

SUPER DRY Acrylic Series

Dry Unit: **3%RH** or **20%RH**

Customizable

Fast Dehumidification

Suitable for Lab and University Use

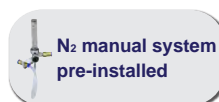
SDA-800S SDA-400S SDA-200S
SDA-50S SDA-70S

All 5 Models

Suitable for Lab and University Use

Developed out of a robust acrylic material, the Super Dry Acrylic Series is engineered to achieve 3% RH control. Equipped with an N₂-Set, 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.

- ◆ Precise Hygrometer
- ◆ Aluminium frame and Acrylic body
- ◆ Stainless steel shelves ESD safe
- ◆ Light, easy to remove
- ◆ Transparent design, Easy for observation
- ◆ Digital panel optional



SDA-200S



SDA-400S



SDA-800S

These highly reliable patented products are 2 year guarantee.



SDA-050S



SDA-070S (Door Open)

※ Due to continuous product improvement, some of the specifications may change

Model	ESDA-800S/ SDA-800S	ESDA-400S/ SDA-400S	ESDA-200S/ SDA-200S	SDA-070S	SDA-050S
Min. Humidity	<3%RH or <20%RH			<20%RH	
External Size W·H·D (mm)	1152x1692x517	574x1692x606	574x768x549	380x469x581	400x400x433
Internal Size W·H·D (mm)	1140x1470x487	561x1470x487	559x737x487	310x430x530	370x370x370
Volume (L)	820	400	220	70	50
Weight (kg)	85	53	20	25	20
Voltage	AC220V (AC110V optional) 50/60Hz				
Structure	Transparent Acrylic & ESD safe(ESDA series)			Transparent Acrylic	
Shelves (Adjustable)	10	5	2	2	1
Max. Weight On Shelf(Kg)	20				
Door	4	2	1	1	1

WGLL Electro-thermal Blast Drying Oven

OVEN

Baking

WGLL Drying Oven is widely used for drying, curing, melting and heating in experiments of industrial enterprises, scientific research institutions, and health and medicine units etc.

- ♦ Vertical design with a cold-rolled steel exterior.
- ♦ Favin stainless steel inner chamber with easy assembly and cleaning.
- ♦ Coordinated bottom air blower and heater for even temperature.
- ♦ Adjustable fan speed to prevent sample loss.
- ♦ LED display with timing and over-temperature protection.
- ♦ Independent temperature safety device for enhanced protection.
- ♦ Optional RS-485 interface for network connection.
- ♦ Well-insulated door with a wide double-glass window and secure seal to prevent heat loss.

New Agent Product

**WGLL-30BE WGLL-45BE WGLL-65BE WGLL-125BE
WGLL-230BE WGLL-625BE**

All 6 Models

Optional device

RS485 port, printer, recorder, external communication, remote control



WGLL-230BE



WGLL-65BE



WGLL-30BE

Model		WGLL-30BE	WGLL-45BE	WGLL-65BE	WGLL-125BE	WGLL-230BE	WGLL-625BE
Air circulation type		double air flues and forced convection					
Performance	temp. range	RT+10 ~ 300°C					
	temp. resolution	0.1°C					
	fluctuation	±1°C					
	temp. uniformity	±2.5%					
Structure	material	stainless steel					
	shell material	spraying cold rolled steel					
	thermal insulation material	aluminum silicate fiber					
Safety device		over-temperature alarm					
		over-temperature protector					
Accessory	working size(W*D*Hmm)	310*310*310	350*350*350	400*360*450	500*450*550	600*500*750	660*760*1250
	exterior size(W*D*Hmm)	460*510*690	500*550*730	550*550*840	636*680*915	730*670*1220	895*925*1830
	packing size(W*D*Hmm)	550*570*760	620*585*800	640*640*908	730*720*1000	900*800*1350	1000*1080*2000
	working capacity	30L	45L	65L	125L	230L	625L
	Shelf loading	15kg					
	Power supply	220V/ 5.5A	220V/ 3.6A	220V/ 7.2A	220V/ 10.5A	220V/ 13.6A	220V/ 7.6A
	NW/GW	33/37kg	37/43kg	44/49kg	60/66kg	94/120kg	120/160kg
	shelf	2pcs					
	shelf bracket	4pcs					

Forced Air Oven Series

OVEN

Baking

LED Microprocessor Controller (with timing function)

Provided for desiccation, torrefaction, wax-melting and sterilization in mining industry, laboratories and scientific research institutes.

Feature

- ◆ 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- ◆ PID controller with over temperature alarm and timing function ensures precise and reliable control.
- ◆ Air circulation system with specific air flow channel ensures a good temperature uniformity performance.
- ◆ Silicon door gasket with long lifetime, and easy to change.
- ◆ A damper adjustment in the front ensures the gas convection enough in working chamber.

Option

- ◆ Independent over-temperature alarm system ensures experiments running safely.
- ◆ RS 485 connector can connect computer to save the data via software.



Model	DHG-9013A	DHG-9030A	DHG-9053A	DHG-9070A	DHG-9140A	DHG-9240A	DHG-9420A
Electrical Requirement	220V 50Hz						380V 50Hz
Temperature Range	RT+10°C ~250°C						
Display Resolution	0.1°C						
Temperature Stability	±1°C						
Temperature uniformity	±3% (at 100°C)						
Ambient Temperature	+5~40°C						
Power Consumption	500W	850W	1100W	1550W	2050W	2450W	3100W
Chamber Volume	16L	30L	50L	80L	136L	220L	420L
Interior Dimension (W×D×H)mm	250×260×250	340×320×320	420×395×350	450×400×450	550×450×550	600×500×750	640×585×1355
Exterior Dimension (W×D×H)mm	530×370×420	620×440×490	720×530×520	740×530×630	840×580×730	880×630×930	780×730×1780
Shelves	2(pcs)						3(pcs)
Timing Range	0~9999min						

Model	DHG-9015A DHG-9035A	DHG-9055A	DHG-9075A	DHG-9145A	DHG-9245A	DHG-9425A
Electrical Requirement	220V 50Hz					380V 50Hz
Temperature Range	RT+10~300°C					
Display Resolution	0.1°C					
Temperature Stability	±1°C					
Temperature uniformity	±3% (at 100°C)					
Ambient Temperature	+5~40°C					
Power Consumption	850W	1100W	1550W	2050W	2450W	3100W
Chamber Volume	16L/30L	50L	80L	136L	220L	420L
Interior Dimension (W×D×H)mm	250×260×250 340×320×320	420×395×350	450×400×450	550×450×550	600×500×750	640×585×1355
Exterior Dimension (W×D×H)mm	530×370×420 620×440×490	720×530×520	740×530×630	840×580×730	880×630×930	780×730×1780
Shelves	2(pcs)					3(pcs)
Timing Range	0~9999min					

Vacuum Oven Series

OVEN

Baking

LED Microprocessor Controller (with timing function)

Vacuum oven is designed especially for drying material which is thermosensitive , oxidative, decomposable easily. It can also work with inert gas to dry some compound material.

Feature

- ◆ 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- ◆ PID controller with over temperature alarm and timing function ensures precise and reliable control, also save more than 40% heating time.
- ◆ A big dual layer tempered glass on the door provides good observation.
- ◆ Door adjustment system with silicon door gasket ensures better vacuity.

Option

- ◆ KF25 Vacuum Port.
- ◆ LED lights on the door.
- ◆ Inert gas valve.



Model	DZF-6012	DZF-6020 DZF-6022 DZF-6024	DZF-6050 DZF-6053 DZF-6055 DZF-6056	DZF-6032 DZF-6034 (Special for chemistry)	DZF-6092 DZF-6094 DZF-6096	DZF-6123 DZF-6126	DZF-6030B DZF-6050B DZF-6055B (Special for biology)
Electrical Requirement	AC220V 50HZ						
Controller	LED display						
Power Consumption	400W	700W	1450W	550W 850W 850W	870W	1500W	300W 650W
Temperature Range	RT-10~200°C						RT-10~65°C
Display Resolution	0.1						
Temperature Stability	±1°C						
Vacuum Degree	133Pa						
Chamber Volume	10L	24L	50L	30L	90L	125L	30L/50L
Ambient Temperature	+5~40°C						
Interior Dimension (W×D×H)mm	220×210×220	300×300×275	415×370×345	320×320×300	450×450×450	500×500×500	320×320×300 415×370×345
Exterior Dimension (W×D×H)mm	500×375×410	605×490×450	730×560×550	630×510×490	740×610×591	790×660×641	610×510×490 730×560×550
Shelves	2(pcs)	1(pcs) 2(pcs) 4(pcs)	2(pcs) 3(pcs) 5(pcs) 6(pcs)	1(pcs) 2(pcs) 4(pcs)	2(pcs) 4(pcs) 6(pcs)	3(pcs)-Independent temp. control 6(pcs)	1(pcs) 2(pcs) 5(pcs)
Chamber Material	304 Stainless steel			316 SS	304 Stainless steel		

OPTIONS

Full experience the high performance of Super Dry with the options

1 Extra shelf



Greatly increase the usable space inside Super Dry

2 Alarm buzzer



3 Wrist strap connection



4 Independent Nitrogen purge system(TN2-02)

Effective usage of N_2 combined with Super Dry, help to accelerate the recovery time and oxidation prevention



5 Nitrogen auto purge system(AN2-03)

Effective usage of N_2 combined with Super Dry, help to accelerate the recovery time and oxidation prevention



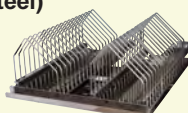
6 Nitrogen valve(HN2-01)

Simple N_2 flow meter



7 SMD double rack(stainless steel)

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



8 Data logger with software

Data logging humidity and temperature



9 Adjustable legs

Adjustable legs are used to enhance the cabinet loading capacity.



10 SMD single rack(stainless steel)

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



11 Humidity alarm light

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



12 Castors(4 pcs)

Front two castors can be braked



SMT Intelligent Storage

Line Side Warehouse



Application example



Customized size available
Reel specifications: 7" 8mm
Storage capacity: 1400 reels/unit



Reel specifications: 7" 8mm
Load/unload time: 8~10s/reel
Storage capacity: 3600 reels/unit

Line Side Warehouse

ESD Safe Tools & Devices



ESD Coat



ESD Shoes



ESD Gloves



Wrist Strap Connection



Carbon Nanotube Trays



Bins and Storage Rack



Moisture Barrier Bag



Clay Desiccants



Vacuum Sealers



Magazine rack, & Component Box



ESD Tester



ESD Work Benches

Safety Equipment SUPERCASE



SUPERCASE is made using special hard plastic material with well calculated sophisticated design so that it has an unimaginably strong resistance against drop, shock, weight-pressure, water and various weather conditions, such as rainstorm and heavy snow. This enables you to store everything delicate and important inside for an easy transport everywhere.



PC-2809

Specifications
Size: 274X218X93mm
Weight: 0.8Kg
Capacity: 3.5L
Color: Orange, Black



PC-5622W

Specifications
Size: 600X440X230mm
Weight: 7.5Kg
Capacity: 35.1L
Color: Army Green, Black



PC-4630

Specifications
Size: 478X370X316mm
Weight: 4.6Kg
Capacity: 25.5L
Color: Black



PC-5013

Specifications
Size: 517X433X143mm
Weight: 4.6Kg
Capacity: 20.8L
Color: Army Green, Black



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Thanks