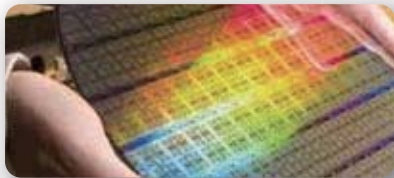




Humidity Solution Provider



# Ace Dragon Corporation

Presents

## The “Dr.Storage Series” Synonymous with humidity management excellence

Ace Dragon Corporation operates worldwide with leading innovations, world class brands and advanced technologies in the Humidity Management industry .

Established in 1991, Ace Dragon Corporation's HQ (i.e. R&D and manufacturing center) is located in the Hsinchu Science Park, also known as the Silicon Valley of Taiwan, thus giving us access to the best engineering capabilities.

Our world-class brand, Dr. Storage, provides the best solution in Humidity Management. All of our products comply with J-STD-033D standard. Providing best humidity management solution, 80% of electronic factories throughout Asia to strengthen their competitive edges successfully. In addition, we have helped thousands of electronic factories globally to enhance their product qualities, thereby enabling our customers to secure recurring orders worth multibillion of US dollars.

### Users:

APPLE, ASUS, ASE Global, ACER, AUO, Advanced, AIDC Semiconductor, Alcatel, Bosch, BenQ, Celestica, CAMPAL, CHIMEI, Coretronic, Continental, D-link, ERICSSON, Everlight, Flextronics, FOXCONN, GIGABYTE, GEM, Harris Cop., IBM, Invevtec, Johns Hopkins University, NASA, National, National Science Council, Omron, Optimax, Philips, Panasonic, Qualcomm, Quanta Computer, Quanta Storage, QSMC, Siemens, Samsung, Sony, Sintek, SMIC, SUNPLUS, TSMC, TATA POWER, TPO, Tsinghua University, UTStarcom, UMC, UMEC, Wistron, Wellypower, 3M.



Taiwan HQ



Shanghai office



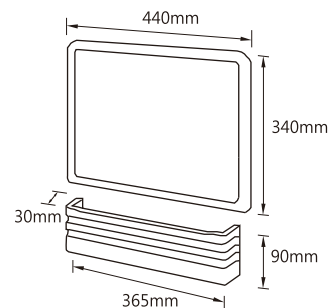
Kuanshan factory



# Introduction of Dry Cabinet

## Colorful Managent

1. **Classification:** Different colors can be classified by project, work sheet, order, client, component, storage life, expiration date or operator etc.
2. **Retrieving:** Small components in inside bin can be retrieved quickly to avoid opening the doors frequently.
3. **Archiving:** ISO documents such as work sheet, order, memo or quality instructions etc. can be put in outside bin for better QA management.



Maximum loading of bin: 5kgs  
Bins can be installed or replaced within 10 seconds.

Inside Bin

Outside Bin

ESD safety

## Display Panel



Temperature Humidity RS232 port

High precision Sensor  
Build-in alarm  
Calibrating reminding

## Data Logger



Record temperature and relative humidity data of cabinet both interior and the ambient environment.

## Dryer



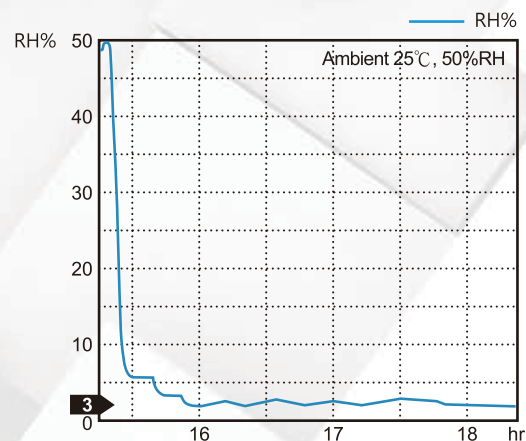
Reliable modular design  
CE & UL approval  
Reliable modular design



Height adjustable shelves



# A1B 1~50%RH Dry Cabinet



**A1B-200**

Capacity:164L  
Shelves:2 pcs  
Outside Dim:W600xD672xH636mm  
Internal Dim:W598xD644xH526mm  
Power Consumption:Ave.48.6Wh;Max.145W



**A1B-400**

Capacity:413L  
Shelves:3 pcs  
Outside Dim:W600xD672xH1274mm  
Internal Dim:W598xD644xH1072mm  
Power Consumption:Ave.48.6Wh;Max.145W

## Accessories (optional) :

**Data Logger**



**Bins**



**Flow Meter(1-25L/min)**



**Alarm tower**



**Nitrogen control module**



**A1B-315**

Capacity:328L  
Shelves:3 pcs  
Outside Dim:W905xD452xH1045mm  
Internal Dim:W903xD424xH870mm  
Power Consumption:Ave.48.6Wh;Max.145W



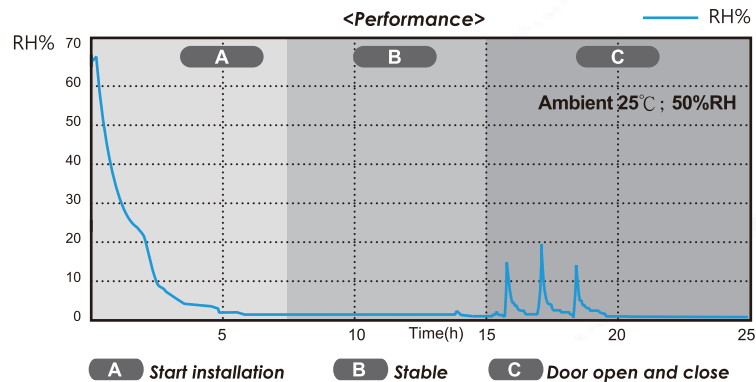
**A1B-575**

Capacity:603L  
Shelves:3 pcs  
Outside Dim:W905xD800xH1045mm  
Internal Dim:W903xD772xH870mm  
Power Consumption:Ave.48.6Wh;Max.145W

# $\leq 5\%RH$ Dry Cabinet X2B

X2B type is especially suitable for storing electrical components, biological testing, PCB boards and pharmacy....etc.

*Comply with J-STD-033D*



## Accessories (optional) :

### Data Logger



### Bins



### Flow Meter(1-25L/min)



### Alarm tower



### Nitrogen control module



### X2B-600

Capacity:642L  
 Shelves:5 pcs  
 Outside Dim. :W600xD672xH1820mm  
 Internal Dim. :W598xD644xH1618mm  
 Power Consumption:Ave.55Wh;Max.295W

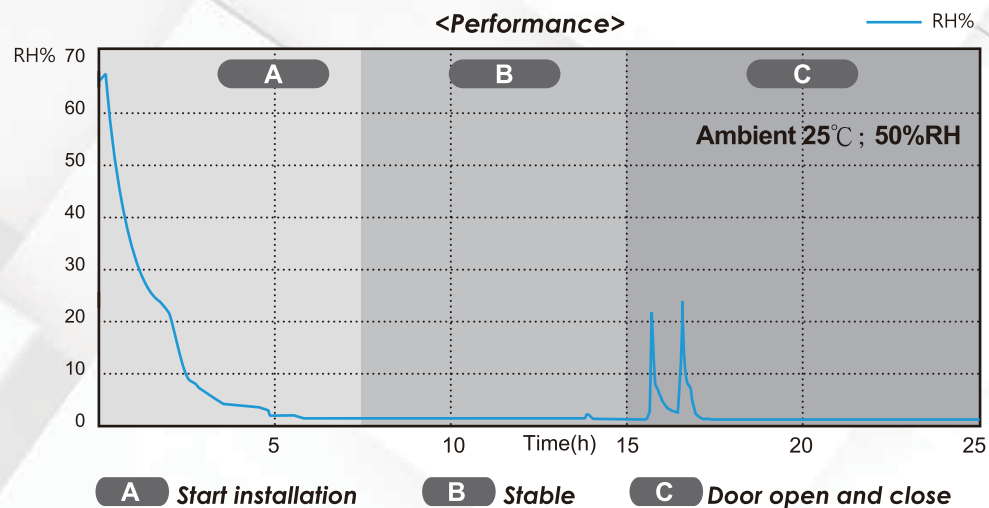


### X2B-1200-6

Capacity:1250L  
 Shelves:5 pcs  
 Outside Dim. :W1200xD672xH1820mm  
 Internal Dim. :W1198xD644xH1618mm  
 Power Consumption:Ave.105Wh;Max.585W

# F1 <1%RH Ultra Low Dry Cabinet

F1 can reach <1%RH automatically just by plugging the power cable in.



Accessories (optional) :

Data Logger



Bins



Nitrogen control module



Flow Meter(1-25L/min)



Alarm tower



**F1-1200-6**

Capacity:1250L

Shelves:5 pcs

Outside Dim. :W1200xD672xH1820mm

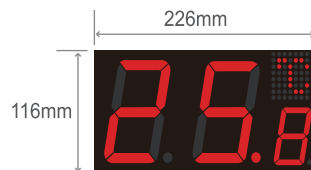
Internal Dim. :W1198xD644xH1618mm

Power Consumption:Ave.48.6Wh;Max.145W

# Alarm Hygrometer

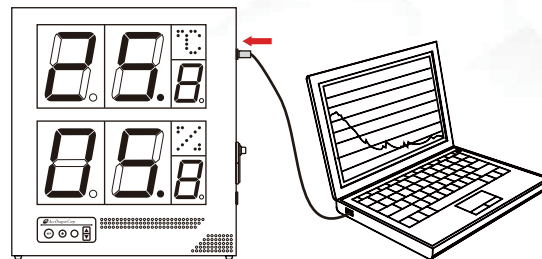
## HT-5D

Alarm Hygrometer is installed at precisely controlled environment, such as storage room of precious collections, production line of high tech electronic components, optical and medical industries ...etc. It can not only display the temperature and relative humidity, but also help engineers to check and repair the facilities immediately by flash buzzer alarm that is activated as soon as the temperature or relative humidity exceeds desired RH/Temp. With this function, millions of dollars could be saved in time. To save monitoring manpower at a huge plant, sets of HT series can be connected to a PC through intranet network. Data of temperature and relative humidity can be recorded and the fluctuation shown in the graph.

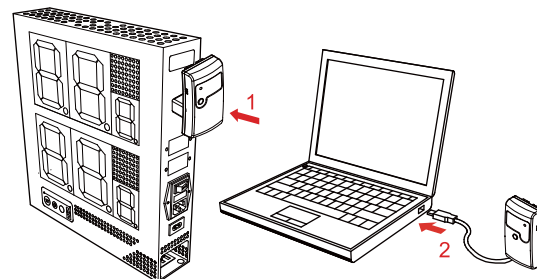


HT-5D

■ Connected to a computer to record H/T graph.



■ Connected to a Data Logger (option) and download to PC.



## Master Hygrometer CP03U



Technical data	
Model	CP03U
Measuring range	0.1~99.9%RH ; -20~65.9°C
Accuracy	±2%RH (1%~80%RH) ; ±0.2°C (at 25°C)
Dimensions	68 x 45 x 25mm
Memory	40,000 measuring values



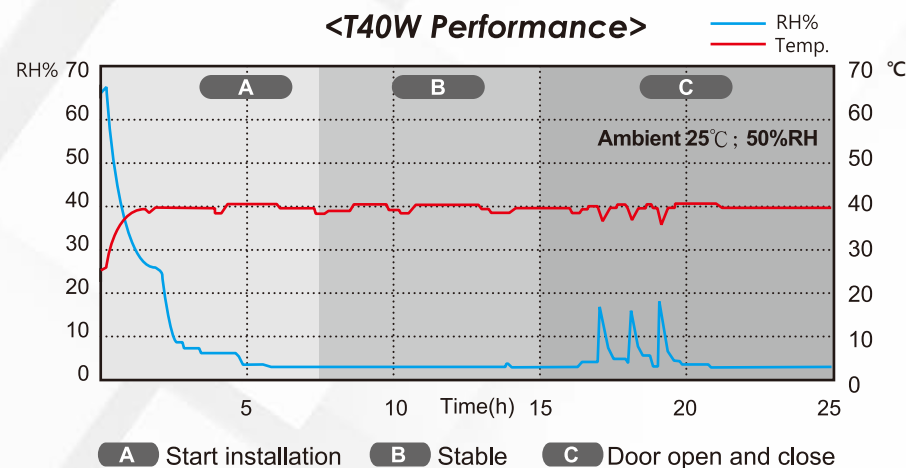
Humidity and temperature data can be downloaded to PC through the USB connector and software CP03U Reader.

Type	HT-5D
Operation Range	0~50°C, 0~90%RH
Precision	±0.5°C, ±2.0%RH(at 50%RH/25°C)
Resolution	0.1°C, 0.1%RH
Dimension	W310xD70xH350mm
Weight	3kgs
Power	110V/230V (select voltage in advance)
Visibility Distance	30m
Power Consumption (average)	12Wh
Calibration Reminding	✓
Alarm Setting (%RH)	✓
Alarm Setting (°C)	✓
Alarm Buzzer	✓
Alarm Flash	✓
Humidity Manager V3 (software)	✓
RS232 Port	✓
Calibration Report	✓
SensorLook V3 (software)	Option
Data Logger	Option



# T40W Baking Dry Cabinet 40°C, <5%RH

- **Easy operation:** T40W can reach <5%RH and 40C automatically just by plugging the power cable in.
- **Reset floor life:** SMD packages which are exposed to the air and exceed the floor life should be stored in the T40W series for resetting the floor life.  
(see J-STD-033D table 4-1, 4-3) For example: If MSD parts of MSD Level 4, 5 and 5a are exposed for less than eight hours, they can be stored in a dry cabinet for resetting the floor life. However, if exposure time is longer than eight hours, the SMD packages should be stored at 40°C in a T40W series to reset the floor life.
- **Fast recovery time:** The baking cabinet combines drying and heating functions. Through mild temp. baking cabinet allows moisture of the SMD package to be fully evaporated, and the moisture can be absorbed by dryers to reverse recovery time. Compare to high temp. oven, mild temp. baking cabinet can greatly avoid thermal oxidation.



Memo Card /Cover Sheet



**T40W-600**

Capacity: 395L  
 Grid Shelves: 5 pcs  
 Outside Dim. :W600xD770xH1805mm  
 (Exclude door handles)  
 Internal Dim. :W540xD500xH1460mm  
 Power Consumption: Ave.600Wh; Max.1200W

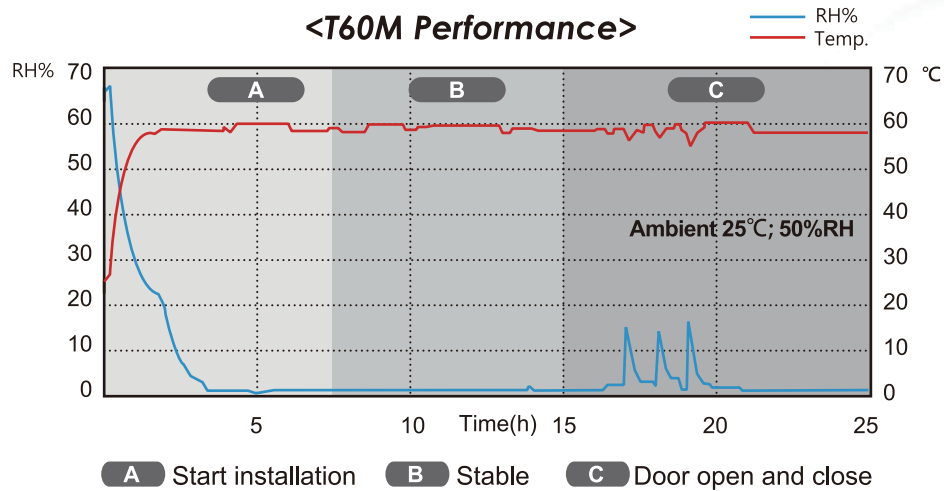


60°C, <1%RH

## Baking Dry Cabinet

T60M

- T60M can reach <1%RH & 60C automatically just by plugging the power cable in.
- Temperature control: T60M can be adjusted from room temperature to 60C. The user can also turn the heater off and use it as a <5%RH dry cabinet.
- Applications in resetting the floor life: Moisture sensitivity SMD packages which are exposed to the air and exceed the floor life should be stored in the T60M series for resetting the floor life. (see J-STD-033D table 4-1, 4-3)



Memo Card / Cover Sheet



T60M-1200-6

Capacity: 833L

Grid Shelves: 5 pcs

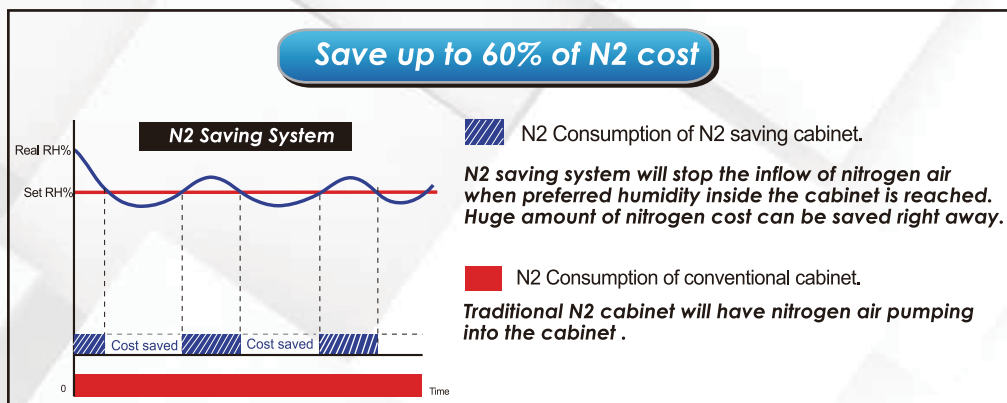
Outside Dim. :W1200xD770xH2005mm  
(Exclude door handles)

Internal Dim. :W1140xD500xH1460mm

Power Consumption: Ave.850Wh;Max.1700W

# QS Smart Nitrogen Control Cabinet

Smart N2 cabinet is designed to control dry air filling into the cabinet, so the desired relative humidity in the cabinet can be reached. The dry air can be nitrogen, CO2 or inert gas. Nitrogen is the most frequently used dry air for an nitrogen cabinet. Traditional Nitrogen cabinet allows N2 to fill in 24/7. Use Dr. Storage smart nitrogen saving cabinet, 30~60% of N2 consumption can be saved.



## Accessories (optional) :

### Data Logger



### Bins



### Flow Meter(1-25L/min)



### Alarm tower



### Nitrogen control module



**QS-600** (Made of Stainless Steel)

Capacity: 624L  
Shelves: 5 pcs  
Outside Dim. : W600xD672xH1820mm  
(Exclude door handles)  
Internal Dim. : W598xD635xH1647mm  
Power Consumption: Ave. 20Wh; Max. 50W  
N2 / Dry air is required



**QS-1200-6** (Made of Stainless Steel)

Capacity: 1250L  
Shelves: 5 pcs  
Outside Dim. : W1200xD672xH1820mm  
(Exclude door handles)  
Internal Dim. : W1198xD635xH1647mm  
Power Consumption: Ave. 20Wh; Max. 50W  
N2 / Dry air is required

# Digital Nitrogen Controller

NC-5R

**Upgrade your traditional Nitrogen cabinet to Smart Nitrogen Cabinet!**

Nitrogen controller NC-5R can be installed on your traditional Nitrogen Cabinet. It is used to designed to control dry air filling into the cabinet, so the desired relative humidity in the cabinet can be reached. The dry air can be nitrogen, CO2 or inert gas. Traditional Nitrogen cabinet allows N2 to fill in 24/7. Use Dr. Storage nitrogen controller NC-5R, 30~60% of dry air/N2 can be saved.

In order to protect components/devices/SMD packages inside the cabinet, the controller NC-5R will continuously fill Nitrogen in even during power outage.



**30~60% of dry air/N2 can be saved!**

Setting Range: 1~99%RH,  
Precision of Sensor:  $\pm 0.3^{\circ}\text{C}$ ,  $\pm 2.0\%\text{RH}$   
Dimensions: W250\*D210\*H90mm

# Glove Box

GB-250



Type	GB-250X	GB-250A	GB-250Q	GB-250
Humidity Range	<5%RH	5~50%RH	1~50%RH	X
Control Mode	Auto	Adjustable	Adjustable (N2 is required)	Non (Empty box)
Capacity	250L			
Outside Dimension	W900xD600xH630mm			
Internal Dimension	W880xD580xH510mm			
Box Frame	Acrylic			



# Drawer Dry Cabinet

- *Improve management efficiency: Different kinds of slide drawers can store various components such as Reel/ PCB/IC/BGA/ SMD components, etc. Well organized items can be retrieved quickly to avoid leaving the door open long time.*
- *The cabinet is made of carbon steel with ESD paint. Customer can choose 3 colors storage bins on windows of the cabinet for color management as an option.*



**DX2B-1200-6**

**Capacity:1250L**

**Outside Dim. :W1200xD672xH1820mm**

**Internal Dim. :W1198xD644xH1618mm**

**Power Consumption:Ave.105Wh;Max.585W**

Select drawers:



**ACE DRAGON CORP.**

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**DS1907**

We keep the right to improve the design and specification without notice.