

組合型恆溫恆濕室  
Walk In Chamber



# Advanced Technology 科技創新技術



### 智慧型調節發熱負載

採電腦自動調整冷媒流量，有效帶走待測品發熱負載

Using computer to automatically adjust refrigerant flow, effectively removing the heat load of the item 「控制超音波之加濕裝置」專利申請第M 92218399號



### 專利技術

目前通過「控制超音波之加濕裝置專利」

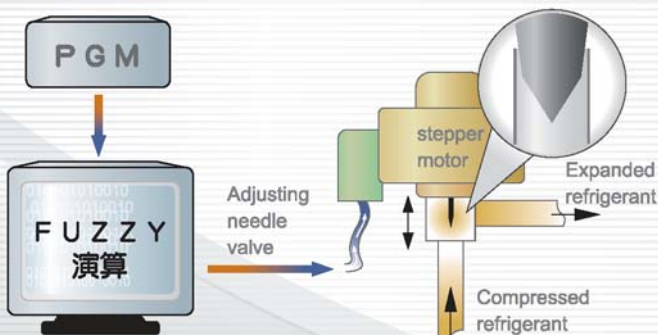
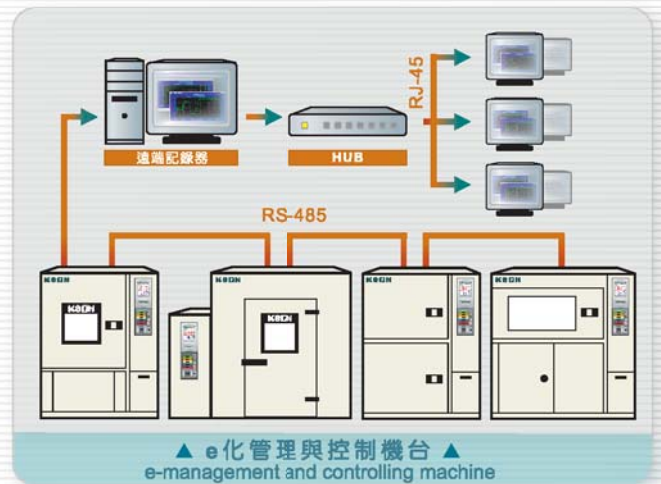
The patents on "The Dew Congealment Prevention for Constant Temperature



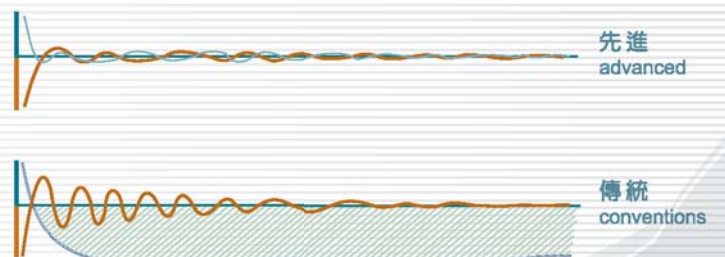
### 網路記錄器

測試結果採e化管理

e-management of testing results



▲ 智慧化調整發熱負載能力 ▲  
Intellectual adjustment of heat loading capability



# Key Value 核心價值

Touch Panel 彩色觸控式控制器



## 機台維護即時掌控

故障病歷軟體設計

Failure records software design



## 常溫保護設計

實驗結束後，機台自動回常溫貼心保護待測品

After the experiment is finished, the machine will automatically restore to normal temperature, thoughtfully protecting the tested item



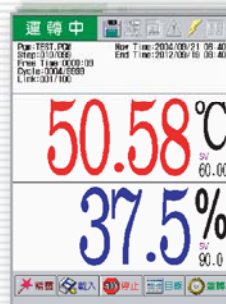
## 創新方便USB隨身碟儲存裝置

透過USB隨身碟即時儲存資料

Using USB pen drive to store data at any time



編輯程式  
Editor program



狀態監視  
Status monitor



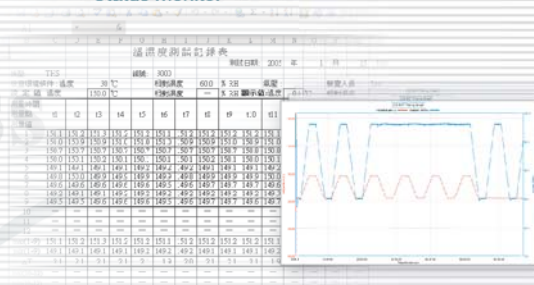
定點功能  
Locating function



## Laboratory class

溫濕度重複性、再現性、穩定性高

High repeatability, reproduction ability and stability of temperature & humidity



## 待測品發熱負載應用範圍 Application scope of a tested item's heat load

規格 Specification 溫度 / 濕度	40°C/80%	40°C/90%	40°C/92%	40°C/95%	60°C/85%	60°C/90%	60°C/95%
低負載 (W) Low load	2300	2000	1500	900	1200	900	600
中負載 (W) Medium load	4000	3600	3000	2600	3300	3000	2500
高負載 (W) High load	6000	5500	5000	4500	4800	4000	3000

PS: 以上為標準規格，可配合客戶需求提高發熱負載能力

The above are standard specifications, enhanced heat loading capability is optional to comply with customer's requirements.

## Convenience 即時方便 Safe 安全安心



### 緊急應變裝置

實驗過程中，斷電時採備援電力啟動緊急抽排風系統  
(有效降低箱內溫度，確保待測品與箱體之安全性)

Using back-up power to activate the emergency exhaust/discharge air system in case of power failure during the experiment progress  
(Effectively decreasing the internal temperature within the chamber to ensure the safety of the tested item and the chamber.)



### 可靠度時序控制 & 安全設計

可程式控制待測品ON/OFF設計，可與機台同步斷電保護設備 & 待測品

The programmable ON/OFF design to control the tested item. Synchronized power-off with the machine to protect the equipment & the tested item



### 主動檢測控制系統

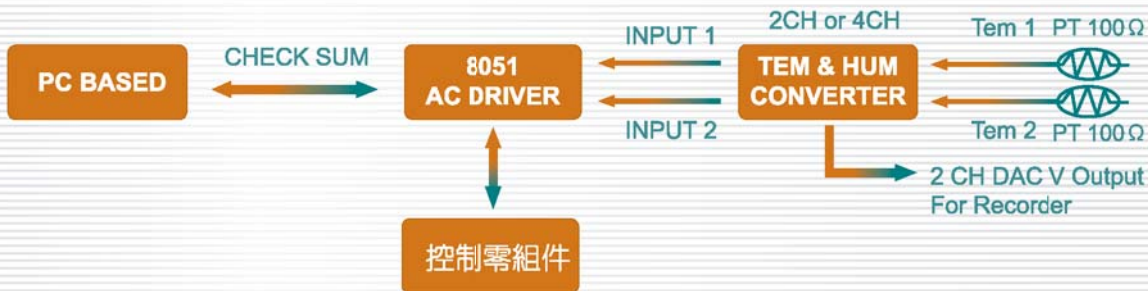
主動檢測控制器，採通訊傳輸CHECK SUM 檢查

Automatic check controller, using telecommunication transmission CHECK SUM verification

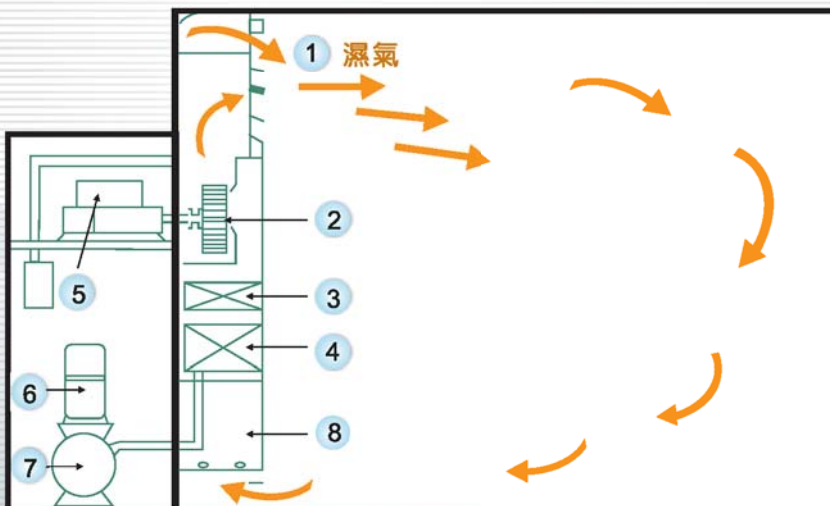
SET	ON (sec)	OFF (sec)	SET	ON (sec)	OFF (sec)
01	FULL ON		06	25	2
02	10	2	07	8	3
03	5	1	08	35	5
04	3	1	09	40	2
05	30	5			

▲ 可程式控制時序接點 ▲  
Programmable controlling timing Junction

### 檢測控制系統架構 Checking and testing control system Structure



### 控制系統圖 Control system diagram



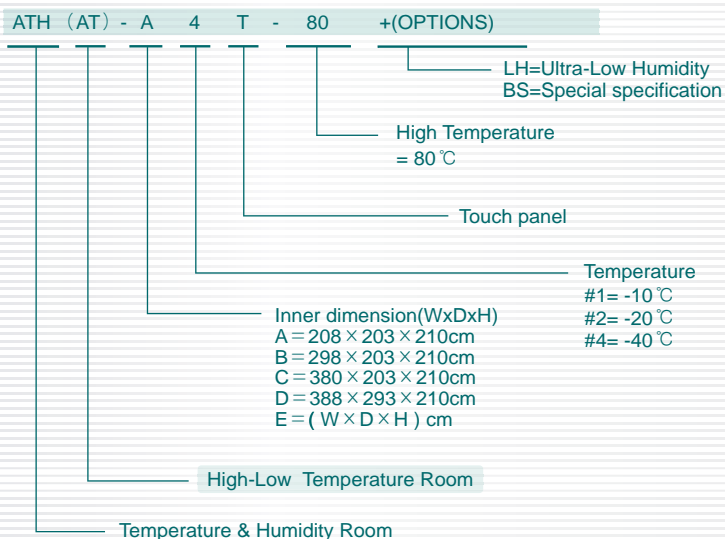
- 1 溫濕度感測器  
Temperature & humidity sensor
- 2 循環風扇  
Circulation fan
- 3 加熱器  
Heater
- 4 蒸發器  
Evaporator
- 5 加濕器  
Humidifier
- 6 壓縮機  
Compressor
- 7 水冷式冷凝器  
Water-cooled condenser
- 8 高效能伺服加濕器 (通過專利申請)  
High efficiency servo humidifier

## 組合型恆溫恆濕室規格表 Walk In Chamber Specification table

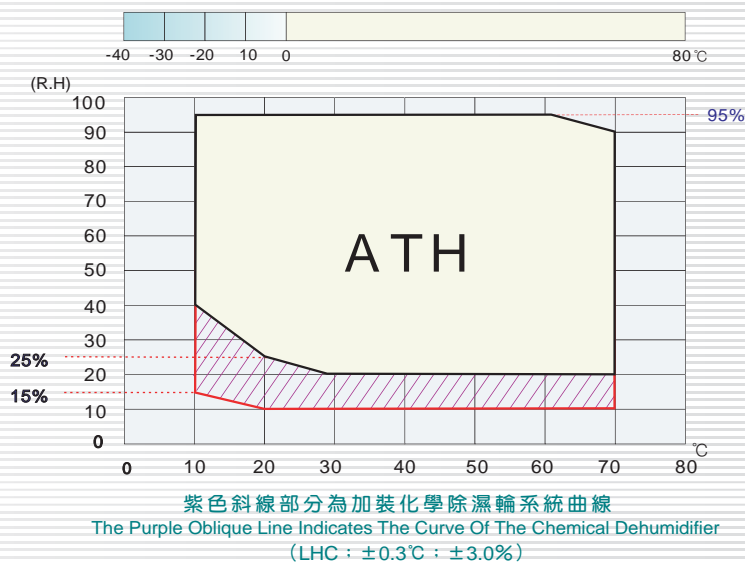
規格 (Specification)	ATH-A1	ATH-A2	ATH-A4	ATH-B1	ATH-B2	ATH-B4	ATH-C1	ATH-C2	ATH-C4	ATH-D1	ATH-D2	ATH-D4	
溫度與濕度控制(Temperaturd And Humidity Control)													
內箱尺寸(Inside Dimensions(W · D · H)cm)	208×203×210	208×203×210	200×195×210	298×203×210	298×203×210	290×195×210	380×203×210	388×203×210	380×195×210	388×293×210	388×293×210	380×285×210	
外箱尺寸(Outside dimensions(W · D · H)cm)	330×225×242	330×225×242	330×225×252	420×225×242	420×225×242	440×225×252	510×225×242	510×225×242	540×225×252	510×315×242	510×315×242	540×315×252	
內箱材料(Internal material)	不銹鋼材質#SUS-304 ( Stainless steel plate)												
外箱材料(External material)	米黃色烤漆鋼板(Cream Yellow Coat Steel Board)												
箱門尺寸 (Door Size)	單門式 Single Opening Door 85 W X 180 H cm												
濕度範圍(Humidity Range)	20%~95%R.H												
絕緣材料(Insulation Material)	防火PU發泡 110mm (150mm)												
冷卻方式(Cooling Method)	水冷(Water Cooled)												
溫度範圍	高溫(High temperature (H.T.)℃)	80	80	80	80	80	80	80	80	80	80	80	
	升溫速率(R.T.~ 80℃)min	60	60	60	60	60	60	60	60	60	60	60	
	低溫(Low temperture(L.T.) ℃)	-10	-20	-40	-10	-20	-40	-10	-20	-40	-10	-20	
	降溫速率(R.T.~ L.T.℃)min	60	60	120	60	60	120	60	60	120	60	60	
溫度分佈均勻度(Temperature uniformity ℃)	± 1.00℃ 以內 (空載下 No-load)												
濕度分佈均勻度(Humidity uniformity %R.H)	± 5%R.H 以內 (空載下 No-load)												
濕度穩定度(Humidity stability %R.H)	± 2%R.H												
溫度穩定度(Temperature stability ℃)	± 0.2℃												
電源 (Power Source)220V3相Phase	65A	70A	65A	90A	100A	110A	110A	115A	140A	160A	170A	215A	
Or 電源 (Power Source)380V3相Phase	40A	45A	50A	55A	60A	65A	60A	70A	85A	95A	100A	125A	
控制系統	溫度感知器 (Sensor)	PT100Ω × 3											
	控制器 (Controller)	IPC Baced Touch Panel											
	設定範圍 (Setting Range)	Temperature: -100.00℃+200.00℃Time : 0h 1m ~ 9999h 59m Cycle : 0 Cycle ~ 9999 Cycle											
	解析度 (Resolution)	Temperature:0.01℃/Time:1min											
	輸出型式 (Output Mode)	PID + PWM + SSR 控制模式(Conrol Method)											
保護裝置 (Safetydevices)	ELB 漏電斷路器保護、FUSE、RC電子式突波防止保護、防止電源雷擊保護、欠相與逆相保護。 控制器內部自我自動偵測保護裝置：資料偵測 DATA CHEAK SUM、控制器內部高低溫上下限保護。 外部故障自動偵測保護：電子式高溫超溫保、固定式高溫超溫保護、濕度斷水保護與濕度電熱空焚保護、壓縮機冷媒壓力保護及過負載保護。 故障異常發生時切斷控制電源及故障視窗指示與警報輸出信號處置、防止鎖門扣裝置。 Electric Leakage Breaker (ELB) protection, FUSE、RC Electronic Surge protector, Electric Shock Protector, lack-phase & anti-phase Protector Controller automatic Self-detective Protection Device:DATA CHECK SUM, Controller Inner Temperature Limits Protection. Exterior Failure Auto-detecting Protection: Electronic Over-heating Protection, Fixed Over-heating Protector, fixed Over-heating Protector, humidity Water Supply Shortage Protector, Humidity Electric Overheat Protector, Compressor Refrigerant Pressure Protector And Overload Protector. When A Failure Occurs, The Control Power Will Be Cut Off With The Failure Indication On The Screen. Provides Alarm Output Signal And A Door Bolt Device To Prevent Door-lock.												
標準配件 (Accessories)	觀察視窗Observation Window(40 W x 40 H cm)、測試孔Testing Hole( 50mm)、防水防爆照明燈(Water-proof And Explosion-proof Lamp) RO逆滲裝置(Reverse Osmosis) Device、For WINDOWS記錄器軟體 (Recorder Software)、伺服加濕系統(Servo Humidifier System)												
擴充性能 (Additional Capability)	低濕化學除濕輪/ e化管理系統/伺服加濕系統 Low-humidity Chemistry Dehumidifier / E Manage System / Servo Humidifier System.												

※以上規格，請以實體為主。

### Model Code



### 溫濕度可控制能力範圍表 Temperature&Humidity Range



www.kson.com.tw

### 慶聲科技股份有限公司

台北 新北市新莊區新樹路387巷2號

TEL : (02)2208-4002

FAX : (02)2208-3491

E-mail : kson@ms13.hinet.net

新竹 TEL : (03)555-4970

E-mail : kson@ms13.hinet.net

高雄 TEL : (07)359-4445

E-mail : kson@ms13.hinet.net

### 營業項目-

恆溫恆濕機(標準型/超低濕實驗型/太陽能專用型/等溫型)/恆溫恆濕室/冷熱衝擊機(氣體式三箱/二箱移動式)  
/等均溫快速溫變試驗機/應力篩選試驗機/太陽能量測系統/LED專用機/自然對流試驗機/高度加速壽命試驗機  
(HAST)/高壓加速壽命試驗機(PCT)/複合型環境試驗機/數位收集系統/高速離子遷移量測系統/e化管理系統  
/實驗室機台管理系統