

Clean Oven (Large Capacity)

Class 100

DES830/DTS830

Operating temp. range RT +30°C~260°C DES 830 RT +30°C~360°C DTS 830

Temp. distribution accuracy ±2.0°C (at 360°C) DES830 ±5.0°C (at 360°C) DTS830

Internal capacity 327L

Class 100, large capacity clean oven at constant temperature.

- Maintain a purity degree of class 100 at stable temperature.
- Equipped with various functions, including program operations.
- Operation monitor visualizes controller status, temp and temp. change.
- Program operation: maximum of 99 steps, 99 patterns with repeat function.
- Safety measures are enriched, including self-diagnosis function and independent overheating prevention device.



Specifications

Model	DES830	DTS830
Circulation method	Forced convection	
Operating temperature range	Room temp. +30~260°C	Room temp. +30~360°C
Temp. control accuracy (JTM K05)	± 0.5°C (at 260°C)	± 0.5°C (at 360°C)
Temp. fluctuation (JIS)	1.0°C (at 260°C)	1.0°C (at 360°C)
Temperature distribution accuracy (JTM K05)	± 2.0°C (at 260°C)	± 5.0°C (at 260°C)
Temp. gradient (JIS)	6.0°C (at 260°C)	10.0°C (at 260°C)
Max. temperature reaching time	Approx. 70 min.	Approx. 80 min.
Clean level	Class100 (when the temperature is stable)	
Interior Material / Exterior	Stainless steel / Cold rolled steel late with melamine resin baking finish	
Heat insulating material	Glass wool	
Heater	Stainless pipe heater	
Fan type / Fan motor	Sirocco fan / Condenser type motor	
Differential pressure meter	Analog type (0 to 300Pa)	
Cable hole	33 mm I.D. (right side)	
Filter	Heat resistance HEPA filter (Dust collect : more than 99.97% at 0.3µm)	
Temp. controller	PID control by microprocessor	
Temp. setting / display method	Digital setting / display with UP/DOWN key	
Timer	Fixed value operation for 1 min. to 99 hr. 59 min. and 24hr. setting	
Operation function	Fixed temp., Auto-start, Auto-stop, Quick auto stop, Program (max.99 steps, 99 patterns, repeat)	
Additional functions	Integration time (max. 65535hrs.), Calibration off-set, Display the amount of power consumption / CO ₂ discharge / Heater operation amount, Power failure recovery mode, User setting information save and recall, External communication terminal (RS485)	
Heater circuit control / Temp. sensor	Triac zero-cross control / K-thermocouple (double sensor)	
Temp. sensor	K-thermocouple (Double sensor)	
Safety device	Self diagnosis functions (Sensor, Fan, Heater, Relay, Triac, Automatic overheat prevention), Independent overheat prevention, Key lock function, Electric leakage breaker, Door switch	
Internal dimensions (W×D×H) (mm)	620×480×1,100	
External dimensions (W×D×H) (mm)	850×1,080×1,955	
Internal capacity	327L	
Withstand load of shelf board	Approx. 30kg / piece	
Shelf rest step number / pitch	35 steps / 30mm	
Power source 50 / 60 Hz	AC220V / AC380V Three phase	
Weight	Approx. 335kg	
Accessories	Shelf plate/Shelf bracket	Stainless wire steel, 3 pcs / 6 pcs

Forced convection circulation

Auto overheat prevention

Independent overheat protector

Self-diagnosis

Key lock

Power outage compensation

Overcurrent ELB

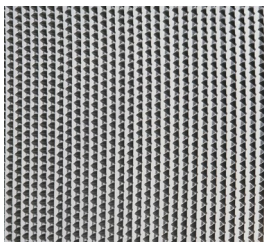
Control Panel



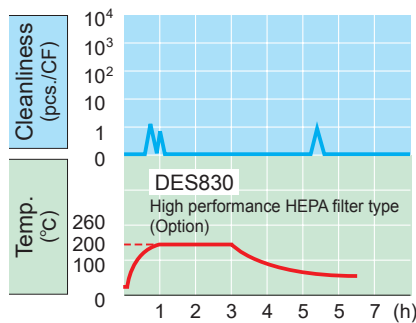
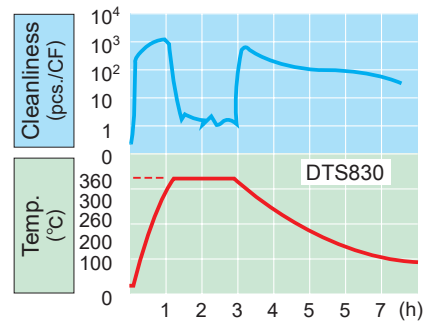
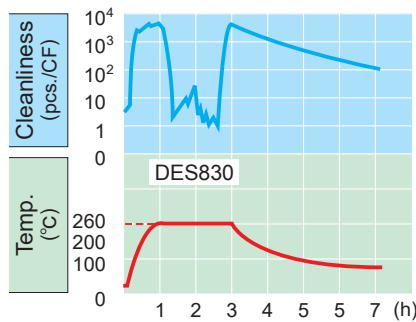
Cable Port



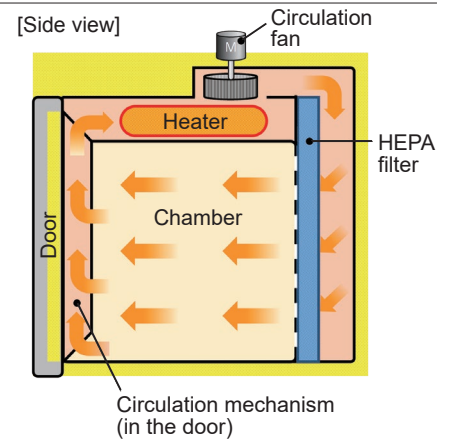
HEPA Filter



Performance Curve



Method



Optional Items

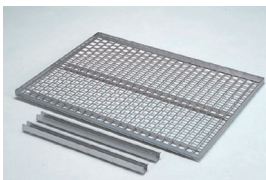
Description	Option Model No.	Main Unit Model No.	Product code
Stainless wire shelf (loading up to 30 kg/shelf)		DES830/DTS830	212678
Stainless punching metal shelf (loading up to 15kg/shelf)	ODE50	DES830/DTS830	212679
Stainless mesh basket shelf (loading up to 15 kg/shelf)	ODE12	DES830/DTS830	212919
Additional sensor (K thermocouple)	ODT48	DES830/DTS830	212946
Silicon plug (with one hole, φ2mm)	ODT52	DES830	212947
*External communication adapter set	OIN90	DES830/DTS830	211880
*Temperature output terminal (4-20mA)	ODT72	DES830/DTS830	212956
*Abnormal alarm display	ODT74	DES830/DTS830	212957
*Time up output terminal	ODT76	DES830/DTS830	212958
*Operation signal output terminal	ODT78	DES830/DTS830	212959
*Event Output Terminal	ODT80	DES830/DTS830	212960
*Emergency stop switch	ODT82	DES830	212941
*Digital recorder, 6 points, sensors are not included	ODT86	DES830/DTS830	212943
*Power cord, 10m	ODT88	DES830	212945
*Power cord, 10m	ODT90	DTS830	212999
*Exhaust ducting unit (manual damper)	ODT92	DES830/DTS830	212921
*Automatic damper	ODT94	DES830/DTS830	212923
*N ₂ gas injection unit (Flow meter included)	ODT96	DES830/DTS830	212932
*Exhaust port for clean room (O.D. 80mm, duct and exhaust fan are not included)	ODT98	DES830/DTS830	212934
*High performance HEPA filter, class 100 in all heating conditions (stable, increase, decrease), max temp: 200°C	ODE14	DES830	212920

* Please specify when ordering main unit.

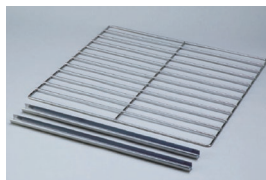
Interior



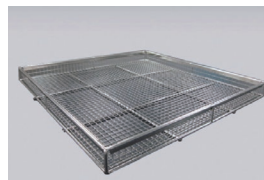
Shelf / Bracket



Stainless punching metal
(Loading up to 15kg/pc)



Stainless wire
(Loading up to 30kg/pc)



Stainless mesh basket shelf
(loading up to 15kg/shelf)
(Placed on top of the standard shelves)

Dimensions (Unit:mm)

