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 capcaity	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.



327L
DES830

327L
DTS830

Specifications

Product code		212668	212669
Model		**DES830**	**DTS830**
Circulation method		Forced convection	
Operating temperature range		Room temp. +30~260°C	Room temp. +30~360°C
Temp. control accuracy*1 (JTM K05)		± 0.5°C (at 260°C)	± 0.5°C (at 360°C)
Temp. fluctuation*1 (JIS)		1.0°C (at 260°C)	1.0°C (at 360°C)
Temperature distribution accuracy*1 (JTM K05)		± 2.0°C (at 260°C)	± 5.0°C (at 260°C)
Temp. gradient*1 (JIS)		6.0°C (at 260°C)	10.0°C (at 260°C)
Max. temperature reaching time*1		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		W620×D480×H1,100mm	
External dimensions*2		W850×D1,080×H1,955mm	
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	

The length of the power cord is about 4 meters outside the unit

*1 Conditions: Rated power supply voltage: Three-phase 200V, Room temperature 23°C±5°C, Humidity 65%rh±20%, Atmospheric pressure: 86 kPa to 106 kPa, No load.

*2 Do not include protrusions.

Forced convection circulation | Auto overheat prevention | Independent overheat protector | Self-diagnosis | Key lock | Power outage compensation | Overcurrent ELB

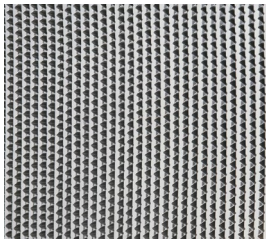
Control Panel



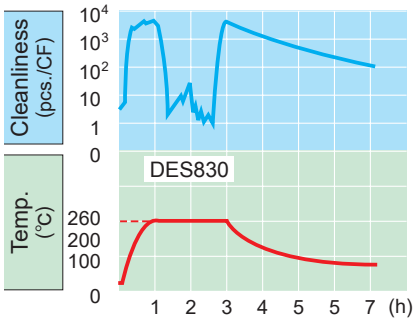
Cable Port

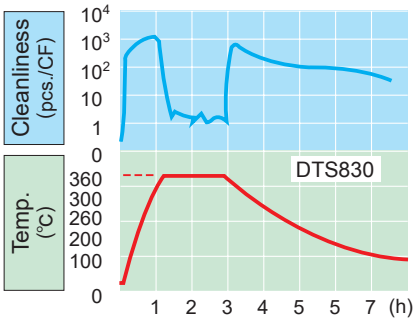


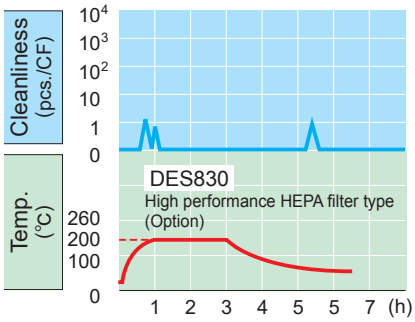
HEPA Filter



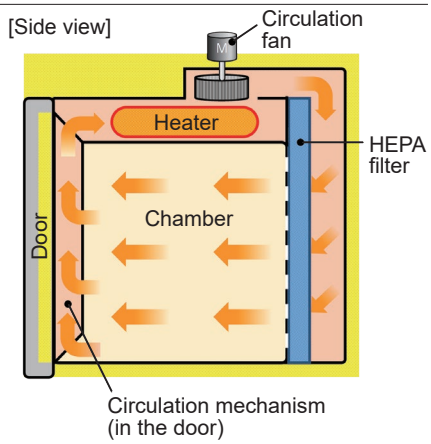
Performance Curve







Method



Optional Items

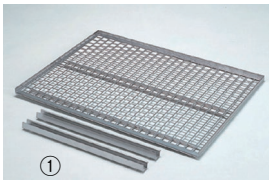
No.	Description	Option model No.	Main unit model No.	Product code
①	Stainless wire shelf (loading up to 30 kg/shelf)		DES830/DTS830	212678
②	Stainless punching metal shelf (loading up to 15kg/shelf)	ODE50	DES830/DTS830	212679
③	Stainless mesh basket shelf (loading up to 15 kg/shelf)	ODE12	DES830/DTS830	212919
④	Additional sensor (K thermocouple)	ODT48	DES830/DTS830	212946
⑤	Silicon plug (with one hole, ϕ2mm)	ODT52	DES830	212947
⑥	*External communication adapter set	OIN90	DES830/DTS830	211880
⑦	*Temperature output terminal (4-20mA)	ODT72	DES830/DTS830	212956
⑧	*External alarm output terminal	ODT74	DES830/DTS830	212957
⑨	*Time up output terminal	ODT76	DES830/DTS830	212958
⑩	*Operation signal output terminal	ODT78	DES830/DTS830	212959
⑪	*Event Output Terminal	ODT80	DES830/DTS830	212960
⑫	*Emergency stop switch	ODT82	DES830	212941
⑬	*Emergency stop switch	ODT84	DTS830	212942
⑭	*Digital recorder, 6 points, sensors are not included	ODT86	DES830/DTS830	212943
⑮	*Power cord, 10m	ODT88	DES830	212945
⑯	*Power cord, 10m	ODT90	DTS830	212999
⑰	*Exhaust ducting unit (manual damper)	ODT92	DES830/DTS830	212921
⑱	*Automatic damper	ODT94	DES830/DTS830	212923
⑲	*N_2 gas injection unit (Flow meter included)	ODT96	DES830/DTS830	212932
⑳	*Exhaust port for clean room (O.D. 80mm, duct and exhaust fan are not included)	ODT98	DES830/DTS830	212934
㉑	*High performance HEPA filter, class 100 in all heating coditions (stable, increase, decrease), max temp: 200°C	ODE14	DES830	212920

* Please specify when ordering main unit.

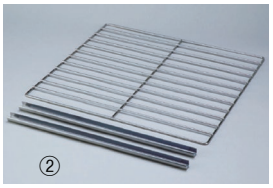
Interior



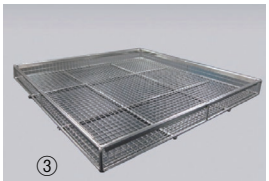
Shelf / Bracket



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)

