

Clean Ovens | Dust-free Environment Heating, Large Capacity

DES830C/830UC, DTS830C/830UC

Operating temp. range	DES: RT+50~260°C	DTS: RT+50~360°C	Cleanliness	Class 100	Internal capacity	300L
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Space-saving, large capacity clean constant temperature chamber.



■ Features

With space-saving and large capacity design, it can suppress dust generation during temperature rise and fall. The controller allows for multifunctional, dialog-type input with simple operation, equipped with an easy-to-confirm graphical monitor.

- With large capacity of 300L for handling bulk workpieces, significantly reducing the footprint while effectively utilizing research, development, and production line space.
- Using high-temperature resistant HEPA filters, reaching up to 360°C; type C maintains cleanliness level 100 during constant temperature while type UC maintains cleanliness level 100 throughout heating, constant temperature, and cooling.

■ Specifications

Model		DES830C/830UC	DTS830C/830UC	
System		Front horizontal air supply circulation		
Operating temp. range		Room temp. +50~260°C	Room temp. +50~360°C	
Cleanliness		C: cleanliness level 100 during constant temperature UC: cleanliness level 100 throughout heating, constant temperature, and cooling		
Performance	GB standard	Temp. fluctuation	±0.5°C	
		Temp. uniformity	±1.5% (at 260°C)	
	JTM standard	Temp. adjusting accuracy	±0.5°C	
		Temp. distribution accuracy	±2.0°C (at 260°C)	
Max. temp. reaching time		Approx. 70 min	Approx. 90 min	
Composition	Interior material		Stainless steel plate	
	Exterior material		Cold rolled steel plate with chemical proofing coating	
	Insulating material		Aluminosilicate cotton	
	Heater		Stainless steel heating tube with fins	
			6kW	9kW
	Fan blade/motor		Centrifugal fan, high-temperature self-cooling motor 250W x 2	
	Differential pressure gauges		Analog type 0~500Pa	
	Cable port		Internal diameter: 33mm×1, located on the right	
	Additional mechanism		Exhaust vent (manual) inner diameter: 50mm	
	HEPA filter		Dust collection efficiency: 99.97% for 0.3µm particles	
N ₂ inlet interface		Outer diameter: Φ10 quick-connect		
Controllers	Temp. control method		3-stage PID	
	Temp. setting method		Digital setting through special function menu keys and ▲/▼ keys	
	Temp. display method		Measured temp. display: Green 4-digit LED digital display Setting temp. display: Red 4-digit LED digital display	
	Timer		1 min~99 h 59 min and 100~999 h 50 min (including timer waiting function)	
	Operation functions		Fixed temp. operation, automatic start operation, automatic stop operation, program operation (up to 16 segments, can repeat, be separated, etc.)	
	Additional functions		Timing function (actual time timing within 24 hours), accumulated timing function (can accumulate up to 49,999 hours), external communication function (RS422A)	
Sensors		K thermocouple (temp. controller and overheating protector)		
Safety device		Self-diagnostic circuit (temperature sensor anomaly, heater disconnection protection, automatic overheating preventer, SSR short-circuit), overheating preventer, overcurrent leakage protection, key lock functions		
Specifications	Internal dimensions		610×480×1100	
	External dimensions (W×D×H mm)		830×1090×1955 (DTS830C/DES830C), 1020×1490×1955 (DTS830UC/DES830UC)	
	Internal capacity		300L	
	Shelf load		30kg/layer	
	Shelf layers/shelf support spacing		35 layers/30mm	
	Power supply (50/60Hz) rated current		3 phase AC380V 10A	3 phase AC380V 15A
Weight		Approx. 350kg		
Accessories	Shelf		Stainless steel wire mesh plate	
			3 pcs	
	Supports		6 pcs	
Options		Shelf plate (1 shelf plate with 2 shelf supports), automatic vent, N ₂ introduction device, micro printer, data logger, combined warning light (standby/operation/fault), temperature output terminal (4~20mA), external alarm output terminal, timer output terminal, central monitoring software, touchscreen controller		

1 Sterilizers

2 Granulation and Spray Dryers

3 Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purifiers

8 Baths

9 Water Circulators

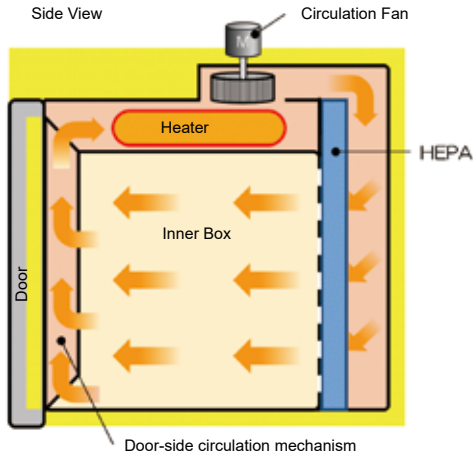
10 Rotary Evaporators

11 Stirrers & Shakers

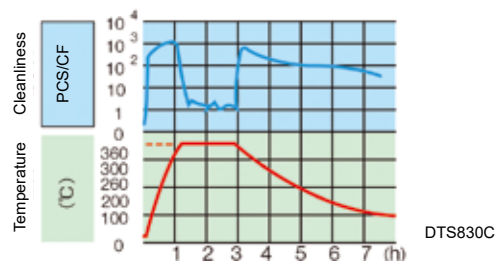
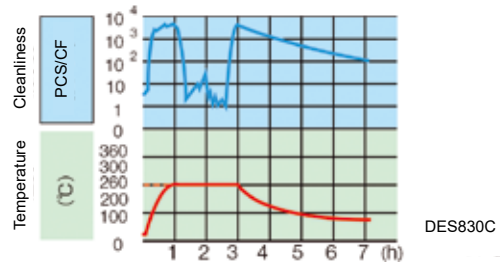
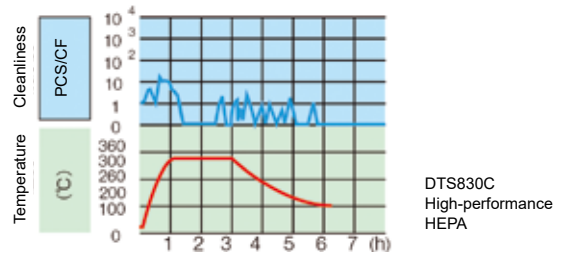
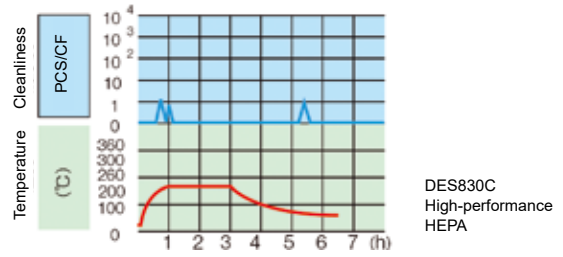
12 Options

- Forced Convection
- Automatic Overheating Preventer
- Overheating Preventer
- Self-diagnostic Function
- Key Lock Function
- Power Failure Compensation Function
- Overcurrent Leakage Circuit Breaker

Structural diagram



Cleanliness data during temperature rise and fall



Control panel



Shelf



Sterilizers	1
Granulation and Spray Dryers	2
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