

**Laboratory Clean Ovens, Class100 / Compact type  
DT300/300H**



DT300 with N2 gas injection unit and Stand (with caster) / DT300H with N2 gas injection unit and Exhaust valve (manual)

- DT300 can maintain the cleanliness class 100 when the temperature is stable at 300deg.C.
- DT300H can maintain the cleanliness class 100 in all heating conditions (stable, increase, decrease).
- Equipped with various functions, including program operation (Max.99 steps, 99 patterns, repeat operation) is available.
- Safety measures are enriched, including self-diagnosis function and an independent overheating prevention device.

High-performance type (Model:DT300H), which prevent the production of fine dust when the working temp. is stable, as well as when the temperature is going up or down.

Model	
300	300H
Operating Temperature Range	
Room Temp. +20 to 300deg.C	
Temp. Distribution Accuracy (JTM K05)	
±2.0deg.C (at 100deg.C) ±4.0deg.C (at 200/300deg.C)	±1.5deg.C (at 100deg.C) ±2.5deg.C (at 200deg.C) ±3.0deg.C (at 300deg.C)
Clean Level	
Class100	
Internal Capacity	
27L	

## ■ Specifications

Model	DT300	DT300H
<b>Performance</b>		
Circulation method	Forced air circulation	
Operating temp. range	Room temp. +20deg.C to 300deg.C	
Temp. control accuracy (JTM K05)	±0.3deg.C(at 300deg.C)	
Temp. fluctuation (JIS)	±0.5deg.C(at 100/200deg.C) , ±1.0deg.C(at 300deg.C)	
Temp. distribution accuracy (JTM K05)	±2.0deg.C(at 100deg.C) ±4.0deg.C(at 200/300deg.C)	±1.5deg.C(at 100deg.C) ±2.5deg.C(at 200deg.C) ±3.0deg.C(at 300deg.C)
Temp. gradient (JIS)	5deg.C(at 100deg.C) 10deg.C(at 200deg.C) 12deg.C(at 300deg.C)	3deg.C(at 100deg.C) 5deg.C(at 200deg.C) 7deg.C(at 300deg.C)
Max. temp. reaching time	Approx. 150 min.	
Clean level	Class 100 (when the temp. is stable)	Class 100 (constantly)
Components		
Interior material	Stainless steel	
Exterior material	Cold rolled steel plate with melamine resin baking finish	
Heat insulating material	Glass wool	
Heater	Stainless pipe heater, 1.2kW	
Fan type	Sirocco fan, Condenser type motor 30W	
Differential pressure meter	Indicator type (tricolor)	
Cable port	33 mm I.D. (right side)	
Air in-take port	33 mm I.D. (right side)	
Exhaust port	16 mm I.D. (R1/2, top side)	
Filter	Heat resistant HEPA filter	High performance HEPA filter
	(dust collect : more than 99.97% at 0.3µm )	
<b>Controller</b>		
Temp. controller	PID control by micro processor	
Temp. setting method	Digital setting with UP/DOWN key	
Temp display method	Digital display	
Other display	Operation monitor (operation condition graphic display by LED patterns)	
Timer	1 min. to 99 Hrs. 59 min	
Operation function	Fixed temp., Auto-start, Auto-stop, Quick auto stop, program (Max.99 steps, 99 patterns, repeat)	
Additional functions	Calendar timer (max. 24 Hrs.), Integration time (max. 65535Hrs.), Clock, Calibration off-set, Display the amount of Power consumption/CO2 discharge/Heater operation amount, Power failure recovery mode, User setting information save and recall	
Heater circuit control	Triac zero-cross control	
Temp. sensor	K-thermocouple (double sensor)	
<b>Safe Device</b>		
Safety countermeasures	Self diagnosis functions(Sensor, Fan, Heater, Relay, Triac, Automatic overheat prevention), Independent overheat prevention, Key lock function, Electric leakage breaker, Door switch	
<b>Standard</b>		
Internal dimensions	W300xD300xH300mm	
External dimensions	W500xD720xH840mm	
Internal capacity	27 L	
Shelf loading	Approx. 15 kg / pc	
Shelf support	6 steps /30mm	
Qty. / Pitch		
Power source (50/60Hz.)	Single-phase, AC100V, 13A(15A)	
Weight	Approx. 87 kg	Approx. 86 kg
<b>Accessories</b>		
Shelf plate	Stainless wire shelf	
Shelf / Shelf support	2 pcs/4 pcs	

\*1 Conditions: temperature and humidity: 23 deg.C+/-5 deg.C, 65%RH+/-20% (no load)

\*2 External dimensions do not include protrusions.

■ Control Panel



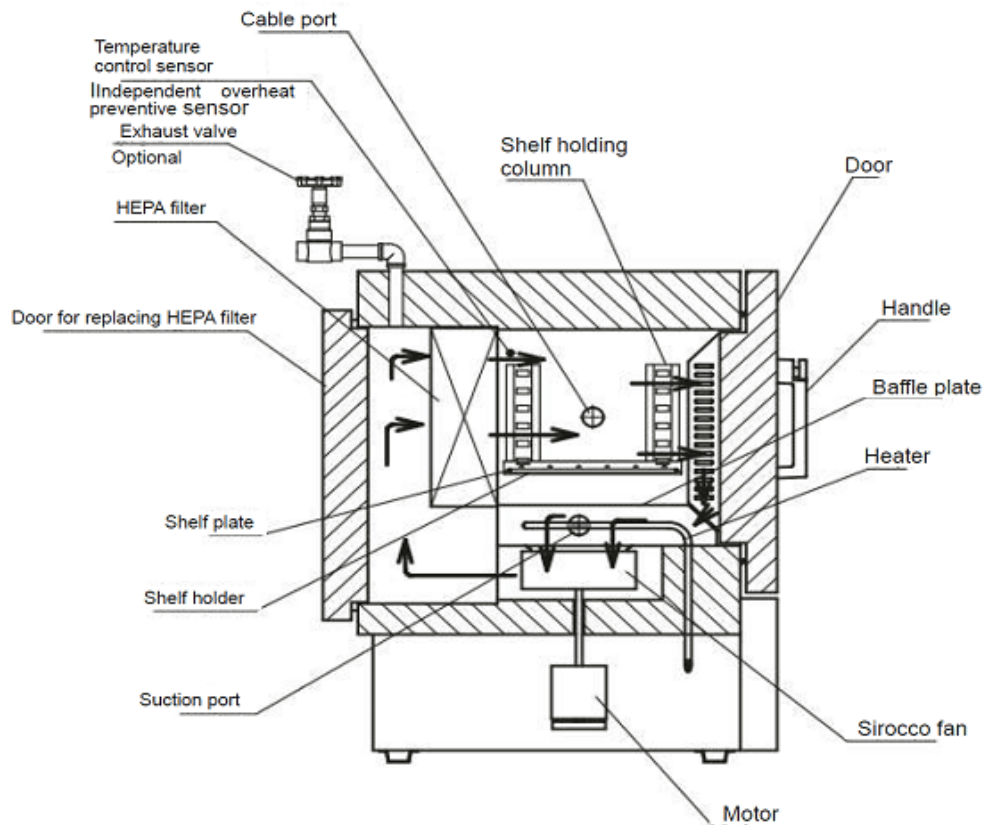
■ Interior



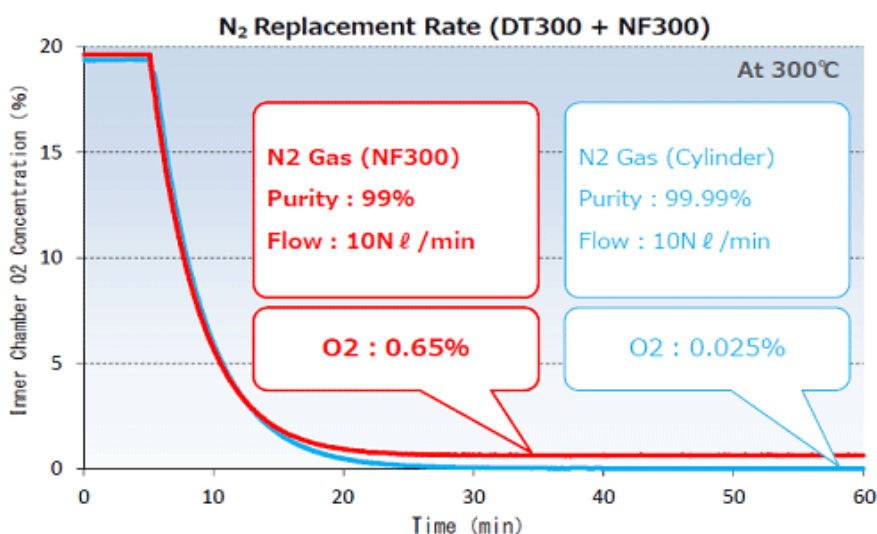
■ Cable Port 33 mm I.D. (right side)



■ Interior Structure



■ Example of installing with Nitrogen Gas Generator, Model: NF300



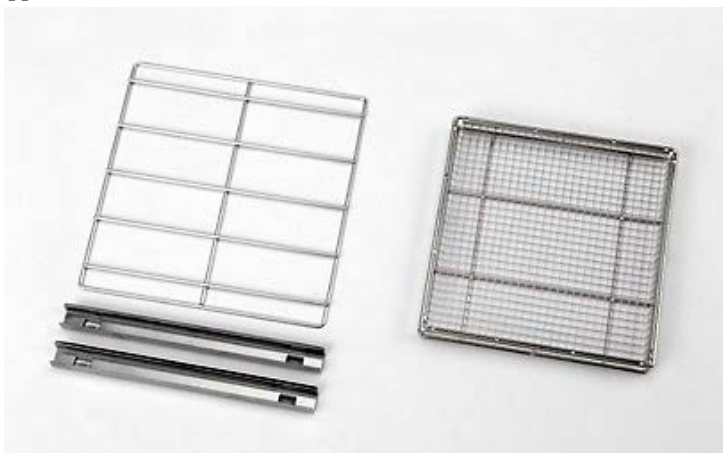
■ Optional items

Remark	Description	Option Model	Model No.	Product Code
	Stand	ODE16	DT300 series	213430
	Stand with caster	ODE18	DT300 series	213431
	Stacking Support	ODE20	DT300 series	213432
	Fixing Support	ODE22	DT300 series	213433
	Stainless wire shelf (with support 2 pcs., loading up to 15 kg/shelf)	ODE24	DT300 series	213434
	Stainless mesh basket shelf (loading up to 15kg/shelf)	ODE26	DT300 series	213435
•	Exhaust valve (manual)	ODE28	DT300 series	213436
•	N <sub>2</sub> Gas injection unit	ODE30	DT300 series	213437
•	Exhaust port for clean room (O.D. 80mm, duct is not included)	ODE32	DT300 series	213438
	Additional Sensor (sheath sensor)	ODT48	DT300 series	212946
	Silicon Plug (with one hole)	ODT52	DT300 series	212947
•	External Communication Terminal (RS485)	ODE34	DT300 series	213439
	External Communication Adapter Set	OIN90	DT300 series	211880
•	Temperature Output Terminal (0-20mA)	ODE36	DT300 series	213440
•	External Alarm Output Terminal	ODE38	DT300 series	213441
•	Time-up Output Terminal	ODE40	DT300 series	213442
•	Operation Signal Output Terminal	ODE42	DT300 series	213443
•	Event Output Terminal	ODE44	DT300 series	213444

**Note:**

The item marked "•" in the column of "Remark" shall be ordered together with the main unit.

■ Shelf (with 2 support)



Stainless wire shelf (Left) / Stainless mesh basket shelf (Right)

■ Stacking support and Stand with caster



■ Stand

