

DAIHAN® SMART Gravity-air Drying Oven "ThermoStable™ SON", 3-Side Heating Zone, 32 · 50 · 105 · 155 Lit  
 With Smart-Lab™ Controller, 4" Full Touch Screen, Fuzzy-PID Control, WiRe™ Service, with Certi. & Traceability, up to 230℃, ±0.5℃  
 스마트 자연 대류식 정밀 건조기/오븐, 우수한 온도 정확성/균일성, WiRe™서비스, 4인치 풀터치스크린 조절기

4-inch Smart-Lab™ Controller

up to 230℃

2-Year Warranty

(1) SMART Model, "ThermoStable™ SON-105"

Heater

Pre-Heating Zone

**3-Side Heating Zone** : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Gravity-air Mechanism)

Perfect Door Lock by Double Latch

- UL, CUL, and CE Certified
  - GD(Good Design)-mark
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceability Data Base System
  - 3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
  - Digital Fuzzy Control System Implementing Superior Temperature Accuracy
  - Optimized Air Flow by Gravity-air Mechanism
  - PL(Product Liability) Insurance
  - Smart-Lab™ Controller WiRe™ App Service
    - Automatic Data Recording
    - Self-Diagnostic Function
    - Ergonomic Design 4" Full Touch Screen TFT LCD
    - Automatic Data Recording
    - Self-Diagnostic Function
    - Internet Connectivity with WlFi
    - Variable Program Setting for Multiple Patterns with Multiple Segments
    - The Recorded Data could be transferred to PC by USB memory
    - Controller SW can be upgraded through USB port.
    - RS232C Interface for Monitoring and Controlling with PC
- \* Ambient to 230℃ of Temp. Range, Fluctuation of ± 0.5℃ at 100℃
- \* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

Specification		(1) SMART Model			
Spec.	Model	SON-32	SON-50	SON-105	SON-155
		Max. Capa. 32L	Max. Capa. 50L	Max. Capa. 105L	Max. Capa. 155L
		(2) SMART-Window Model			
		SON-W105	SON-W155		
Capacity		32 Lit	50 Lit	105 Lit	155 Lit
Dimension (w×d×h)	Interior (mm)	310×290×360	370×350×420	485×409×535	550×474×600
	Exterior (mm)	458×557×664	518×647×724	653×712×882	718×777×947
Heater Power		500 W	650 W	1.4 kW	1.6 kW
Temp.	Range	Room Temp +5℃ to 230℃			
	Fluctuation	± 0.5℃ at 100℃, ± 0.6℃ at 150℃			± 0.5℃ at 100℃, ± 0.8℃ at 150℃
	Variation	± 1.2℃ at 100℃, ± 2.2℃ at 150℃			
	Sensor	PT 100			
Control Resolution		± 0.1℃			
Heat-up Time		30 min. to 100℃, 43 min. to 150℃	30 min. to 100℃, 45 min. to 150℃	35 min. to 100℃, 50 min. to 150℃	
Recovery Time (Door open 30sec)		8 min. to 100℃, 10 min. to 150℃		10 min. to 100℃, 12 min. to 150℃	
Controller		Smart-Lab™ Controller			
RS232 Port		Available to connect with PC			
Display		4" Full Touch Screen TFT LCD			
Timer		99hr 59 min (delay/continuous function)			
Storage		Temperature and Timer setting values			
Material	Internal	Stainless-steel (#304), Corrosion Resistant			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)		2 Stainless-steel Wire Shelf, Load per Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea		2ea	
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Alarm		Error Status and Timer-end			
Net Weight (kg)		36	44	69	78
Packing Size (w×d×h) (mm)		562×664×747	622×754×807	743×819×1,068	808×884×1,133
Shipping Weight (kg)		43	59	79	92
Power Consumption		502 W	674 W	1390 W	1566 W
Energy Consumption, at 100℃		90 Wh	117 Wh	187 Wh	204 Wh
	, at 150℃	181 Wh	230 Wh	337 Wh	398 Wh
Electric Reqts.		120V, 60Hz or 230V, 50/60Hz			

\* Other Specifications are available upon Customer's Request.

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## Ordering Information

### (1) Smart Model, Gravity-air, with Wire Shelf

DH.SWON05032	Oven, Standard, 230V, 32 Lit, "ThermoStable SON-32"
DH.SWON05050	, 50 Lit, "ThermoStable SON-50"
DH.SWON05105	, 105 Lit, "ThermoStable SON-105"
DH.SWON05155	, 155 Lit, "ThermoStable SON-155"
DH.SWON06032	Oven, Standard, 120V, 32 Lit, "ThermoStable SON-32"
DH.SWON06050	, 50 Lit, "ThermoStable SON-50"
DH.SWON06105	, 105 Lit, "ThermoStable SON-105"
DH.SWON06155	, 155 Lit, "ThermoStable SON-155"

### (2) Built in Viewing Window Model, Gravity-air, with Wire Shelf

DH.SWON07105	Oven, Window, 230V, 105 Lit, "ThermoStable SON-W105"
DH.SWON07155	, 155 Lit, "ThermoStable SON-W155"
DH.SWON08105	Oven, Window, 120V, 105 Lit, "ThermoStable SON-W105"
DH.SWON08155	, 155 Lit, "ThermoStable SON-W155"

### Spare Stainless-steel Wire Shelf

DH.WON11032	Wire Shelf, for 32 Lit, "ONS032", w280×d280mm
DH.WON11050	, for 50 Lit, "ONS050", w340×d310mm
DH.WON11105	, for 105 Lit, "ONS105", w455×d375mm
DH.WON11155	, for 155 Lit, "ONS155", w520×d440mm

### Gravity-air Oven with Validation (IQ, OQ) Service

DH.SWON31032	Validation Service(IQ, OQ), with "SON-32", "SONV1032"
DH.SWON31050	, with "SON-50", "SONV1050"
DH.SWON31105	, with "SON-105", "SONV1105"
DH.SWON31155	, with "SON-155", "SONV1155"
DH.SWON32105	Validation Service(IQ, OQ), with "SON-W105", "SONV2105"
DH.SWON32155	, with "SON-W155", "SONV2155"

## >> DAIHAN WiRe™ App Service

4" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

WiRe™ App Service

## Controlled by Smart-Phone

up to 230℃

2-Year Warranty

(2) SMART-Window Model, Gravity-air Oven

Stainless-steel Wire Shelf (Included)