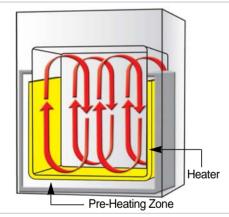
Description

DAIHAN[®] Ovens, Gravity Convection-type, "WON", 32-/50-/105-/155 Lit., with Certi. & Traceability WWW With $2 \times$ Wire Shelves, Digital Fuzzy Control, Jog-Dial with Push Button, Digital LCD with Backlight, up to 230° C, $\pm 0.5^{\circ}$ C



Oven, Gravity/Natural Flow-type, Standard Model, with Wire Shelves "WON-155"



The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Optimized Air Flow by Gravity Convection Mechanism
- Jog-Dial Control System
- CE Certified UL/CUL Certified
- PL(Product Liability) Insurance
- * Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
- * The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism : 3-Side Heating * Optimized Air Flow by Gravity Convection Mechanism
- * Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- * New Jog-Dial with Push Button * Compact New Body Design
- * 2 ea of Stainless Steel Wire Shelves Included * Alarm Function : Error status and Timer-end
- * RS232C Interface for Monitoring and Controlling with PC
- * Ambient +5 °C to 230 °C Range with Fluctuation of ± 0.5 °C at 100 °C
- * Storage Function of Temperature and Timer setting values
- * Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)
- * Corrosion Resistant 304 Stainless Steel Chamber
- * Over Temperature & Over Current Protection, Sensor Error Detection

Specification

Interior (mm) 290 × 310 × 360 350 × 370 × 420 480 × 485 × 535 475 × 550 × 600 (w × d × h) Exterior (mm) 458 × 556 × 662 518 × 646 × 722 653 × 711 × 879 718 × 776 × 944 Heater Power 500 W 650 W 1.4 kW 1.6 kW Temp. Range Ambient Temperature +5°C to 230°C ± 0.8°C at 150°C ± 0.8°C at 150°C Fluctuation ± 0.5°C at 100°C, ± 0.6°C at 150°C ± 0.8°C at 150°C ± 0.8°C at 150°C Variation ± 1.2°C at 100°C, ± 2.2°C at 150°C ± 0.8°C at 150°C ± 0.8°C at 150°C Heat-up Time 30 min. to 100°C, 30 min. to 100°C, 45 min. to 150°C 30 min. to 100°C, 45 min. to 150°C 35 min. to 100°C, 50 min. to 150°C Recovery Time (Door open 30sec) 8 min. to 100°C, 8 min. to 100°C, 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C RS232 Port Available to connect with PC Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button 10 min. to 150°C 1			Standard Model, without Window				
"WON-32" "WON-50" Built-in Viewing Window Model Capacity 32Lit 50Lit Interior (mm) 290 × 310 × 360 350 × 370 × 420 480 × 485 × 535 475 × 550 × 600 Dimension (w × d × h) Interior (mm) 290 × 310 × 360 350 × 370 × 420 480 × 485 × 535 475 × 550 × 600 600 Heater Power 500 W 650 W 1.4 kW 1.6 kW Heater Power 500 W 650 W 1.4 kW 1.6 kW Temp. Range Ambient Temperature +5° to 230°C ± 0.8°C at 150°C ± 0.8°C at 150°C Fluctuation ± 0.5°c at 100°C, ± 0.6°C at 150°C ± 0.8°C at 150°C ± 0.8°C at 150°C Sensor PT 100 Control Resolution ± 0.1°C 30 min. to 100°C, 45 min. to 150°C 35 min. to 100°C, 50 min. to 100°C, 10 min. to 150°C <	Мо	dol			"WON-105"	"WON-155"	
Capacity 32Lit 50Lit 105Lit 155Lit Dimension (w × d × h) Interior (mm) 290 × 310 × 360 350 × 370 × 420 480 × 485 × 535 475 × 550 × 600 Exterior (mm) 458 × 556 × 662 518 × 646 x 722 653 × 711 × 879 718 × 776 × 944 Heater Power 500 W 650 W 1.4 kW 1.6 kW Temp. Range Ambient Temperature +5°C to 230°C ± 0.8°C at 150°C ± 0.8°C at 150°C Variation ± 0.5°C at 100°C, ± 0.6°C at 150°C ± 0.8°C at 150°C ± 0.8°C at 150°C Variation ± 0.5°C at 100°C, ± 0.6°C at 150°C ± 0.8°C at 150°C Sensor PT 100 Control Resolution ± 0.1°C Heat-up Time 30 min. to 100°C, 45 min. to 100°C, 45 min. to 100°C, 45 min. to 100°C, 45 min. to 100°C, 10 min. to 150°C 10 min. to 150°C Recovery Time (Door open 30sec) 8 min. to 100°C, 8 min. to 100°C, 10 min. to 150°C 10 min. to 150°C Rs232 Port 8 min. to 100°C, 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C Stainless Steel (#304) External Stainless Steel (#304) External Insulation Glass	MO	uei	"WON-32"	"WON-50"	Built-in Viewing Window Model		
Interior (mm) 290 × 310 × 360 350 × 370 × 420 480 × 485 × 535 475 × 550 × 600 (w × d × h) Exterior (mm) 458 × 556 × 662 518 × 646 × 722 653 × 711 × 879 718 × 776 × 944 Heater Power 500 W 650 W 1.4 kW 1.6 kW Temp. Range Ambient Temperature +5°C to 230°C ± 0.8°C at 150°C ± 0.8°C at 150°C Fluctuation ± 0.5°C at 100°C, ± 0.6°C at 150°C ± 0.8°C at 150°C ± 0.8°C at 150°C Variation ± 1.2°C at 100°C, ± 2.2°C at 150°C ± 0.8°C at 150°C ± 0.8°C at 150°C Heat-up Time 30 min. to 100°C, 30 min. to 100°C, 45 min. to 150°C 30 min. to 100°C, 45 min. to 150°C 35 min. to 100°C, 50 min. to 150°C Recovery Time (Door open 30sec) 8 min. to 100°C, 8 min. to 100°C, 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C RS232 Port Available to connect with PC Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button 10 min. to 150°C 1					"WON-W105"	"WON-W155"	
(w × d × h) Exterior (mm) 458 × 556 × 662 518 × 646 x 722 653 × 711 × 879 718 × 776 × 944 Heater Power 500 W 650 W 1.4 kW 1.6 kW Temp. Range Ambient Temperature +5 °C to 230 °C ± 0.8 °C at 150 °C ± 0.8 °C at 150 °C ± 0.8 °C at 150 °C Variation ± 0.5 °C at 100 °C, ± 0.6 °C at 150 °C ± 0.8 °C at 150 °C ± 0.8 °C at 150 °C Sensor PT 100 ± 0.1 °C ± 0.8 °C at 150 °C ± 0.8 °C at 150 °C Heat-up Time 30 min. to 100 °C, 43 min. to 100 °C, 43 min. to 150 °C 30 min. to 100 °C, 45 min. to 150 °C 35 min. to 100 °C, 50 min. to 150 °C Recovery Time (Door open 30sec) 8 min. to 100 °C, 10 min. to 150 °C 8 min. to 100 °C, 10 min. to 150 °C 10 min. to 150 °C<	Capacity		32Lit	50Lit	105Lit	155Lit	
Heater Power 500 W 600 V 000 V 12 V 000 V 0000 V 000 V	Dimension	Interior (mm)	290×310×360	350×370 x 420	480×485×535	475×550×600	
Range Ambient Temperature +5 °C to 230 °C Fluctuation ± 0.5 °C at 100 °C, ± 0.6 °C at 150 °C ± 0.8 °C at 150 °C Variation ± 1.2 °C at 100 °C, ± 2.2 °C at 150 °C ± 0.8 °C at 150 °C Sensor PT 100 Control Resolution ± 0.1 °C Heat-up Time 30 min. to 100 °C, 43 min. to 100 °C, 43 min. to 150 °C 30 min. to 100 °C, 43 min. to 150 °C 30 min. to 100 °C, 43 min. to 150 °C 30 min. to 150 °C Recovery Time (Door open 30sec) 8 min. to 100 °C, 10 min. to 150 °C 10 min. to 150	(w $ imes$ d $ imes$ h)	Exterior (mm)	458×556×662	$518{\times}646x722$	653 imes 711 imes 879	718×776×944	
Fluctuation ± 0.5 °c at 100 °c, ± 0.6 °c at 150 °c ± 0.8 °c at 150 °c Variation ± 1.2 °c at 100 °c, ± 2.2 °c at 150 °c ± 0.8 °c at 150 °c Sensor PT 100 Control Resolution ± 0.1 °c Heat-up Time 30 min. to 100 °c, 45 min. to 100 °c, 45 min. to 100 °c, 43 min. to 150 °c 30 min. to 100 °c, 45 min. to 100 °c, 45 min. to 100 °c, 12 min. to 100 °c, 10 min. to 150 °c 30 min. to 100 °c, 12 min. to 100 °c, 10 min. to 150 °c 10 min. to 150 °c Recovery Time (Door open 30sec) 8 min. to 100 °c, 10 min. to 150 °c 8 min. to 100 °c, 10 min. to 150 °c 11 min. to 150 °c 12 min. to 100 °c, 12 min. to 100 °c, 10 min. to 150 °c	Heater Power		500 W	650 W	1.4 kW	1.6 kW	
Temp. Variation ± 1.2°C at 100°C, ± 2.2°C at 150°C Sensor PT 100 Control Resolution ± 0.1°C Heat-up Time 30 min. to 100°C, 43 min. to 150°C A min. to 150°C 45 min. to 150°C A min. to 150°C 45 min. to 100°C, 45 min. to 100°C, 50 min. to 150°C Recovery Time (Door open 30sec) 8 min. to 100°C, 10 min. to 150°C Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button RS232 Port Available to connect with PC Display Digital LCD with Back Light Timer 99hr 59 min (delay/continuous function) Material Internal Insulation Glass Wool Shelves 2ea of Stainless Steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea		Range	Ambient Temperature +5 ℃ to 230 ℃				
Variation ± 1.2 °C at 100 °C, ± 2.2 °C at 150 °C Sensor PT 100 Control Resolution ± 0.1 °C Heat-up Time 30 min. to 100 °C, 43 min. to 100 °C, 43 min. to 150 °C 30 min. to 100 °C, 45 min. to 150 °C 30 min. to 100 °C, 45 min. to 150 °C 35 min. to 100 °C, 50 min. to 100 °C, 43 min. to 150 °C 45 min. to 150 °C 45 min. to 150 °C 50 min. to 150 °C 50 min. to 100 °C, 12 min. to 100 °C, 12 min. to 100 °C, 10 min. to 150 °C <	Temn	Fluctuation				\pm 0.8 °C at 150 °C	
Control Resolution ±0.1 °C Heat-up Time 30 min. to 100 °C, 43 min. to 150 °C 30 min. to 100 °C, 45 min. to 150 °C 30 min. to 100 °C, 45 min. to 150 °C 30 min. to 100 °C, 45 min. to 150 °C 35 min. to 100 °C, 50 min. to 150 °C Recovery Time (Door open 30sec) 8 min. to 100 °C, 10 min. to 150 °C 8 min. to 100 °C, 10 min. to 150 °C 12 min. to 100 °C, 10 min. to 150 °C 12 min. to 100 °C, 10 min. to 150 °C 12 min. to 100 °C, 10 min. to 150 °C 12 min. to 100 °C, 10 min. to 150 °C 10 min. to 150 °C Controller Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button Natilable to connect with PC 10 min. to 150 °C 10 min. to 150 °C 10 min. to 150 °C Display Digital LCD with Back Light Timer 99hr 59 min (delay/continuous function) Material Internal Stainless Steel (#304) External Insulation Glass Wool Glass Wool Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea 2ea 2ea 2ea	remp.	Variation	± 1.2℃ at 100℃, ± 2.2℃ at 150℃				
Heat-up Time 30 min. to 100 ℃, 30 min. to 100 ℃, 43 min. to 100 ℃, 43 min. to 150 ℃ 30 min. to 100 ℃, 45 min. to 150 ℃ 30 min. to 100 ℃, 50 min. to 150 ℃ Recovery Time (Door open 30sec) 8 min. to 100 ℃, 10 min. to 150 ℃ 10 min. to 150 ℃ 10 min. to 150 ℃ 12 min. to 100 ℃, 12 min. to 100 ℃, 10 min. to 150 ℃ 10 min. to 150 ℃ Controller Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button RS232 Port Available to connect with PC Digital LCD with Back Light Timer 99hr 59 min (delay/continuous function) Material Internal Internal Toga of Stainless Steel (#304) External Insulation Glass Wool Stainless Steel Shelves included Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm Itea Internal Control open convection Type		Sensor	PT 100				
Heat-up lime 43 min. to 150°C 45 min. to 150°C 45 min. to 150°C 50 min. to 150°C Recovery Time (Door open 30sec) 8 min. to 100°C, 10 min. to 150°C 8 min. to 100°C, 10 min. to 150°C 8 min. to 100°C, 10 min. to 150°C 12 min. to 100°C, 10 min. to 150°C 10 min. to 150°C <td< th=""><th>Control Resolut</th><th>tion</th><th></th><th>±0</th><th>.1℃</th><th></th></td<>	Control Resolut	tion		±0	.1℃		
(Door open 30sec) 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C 10 min. to 150°C Controller Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button RS232 Port Available to connect with PC Display Digital LCD with Back Light Timer 99hr 59 min (delay/continuous function) Material Internal External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea	Heat-up Time					35 min. to 100 ℃, 50 min. to 150℃	
Controller Digital Fuzzy Control by Advanced Microprocessor Jog-Dial with Push Button RS232 Port Available to connect with PC Display Digital LCD with Back Light Timer 99hr 59 min (delay/continuous function) Material Internal External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless Steel shelves included Ventilation Net with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type	Recovery Time		8 min. to 100 °C,	8 min. to 100 °C,	12 min. to 100 ℃,	12 min. to 100 ℃,	
Internal Internal Insulation Glass Wool Stainless steel (#304) External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless Steel cap, Hole Diameter 40mm Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea	(Door open 30s	sec)	10 min. to 150°C	10 min. to 150 °C	10 min. to 150℃	10 min. to 150 ℃	
Display Digital LCD with Back Light Timer 99hr 59 min (delay/continuous function) Material Internal Stainless Steel (#304) External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type	Controller						
Timer 99hr 59 min (delay/continuous function) Material Internal Stainless Steel (#304) External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless steel shelves included Ventilation 1ea 2ea Circulation Gravity Convection Type	RS232 Port		Available to connect with PC				
Internal Stainless Steel (#304) External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type	Display		Digital LCD with Back Light				
External Powder Coated Steel Insulation Glass Wool Shelves 2ea of Stainless steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type	Timer		99hr 59 min (delay/continuous function)				
Insulation Glass Wool Shelves 2ea of Stainless steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type		Internal		Stainless S	Steel (#304)		
Shelves 2ea of Stainless steel shelves included Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type	Material	External					
Ventilation Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm 1ea 2ea Circulation Gravity Convection Type		Insulation		Glass	Wool		
Ventilation 1ea 2ea Circulation Gravity Convection Type	Shelves						
1ea 2ea Circulation Gravity Convection Type	Ventilation						
· · · · · · · · · · · · · · · · · · ·							
Safety device Over Temp and Over Current Protector, Sensor Error Detector	Circulation						
Over remp. and over ourent rotector, densor Endr Delector	Safety device		Over Temp. and Over Current Protector, Sensor Error Detector				
Others UL / CUL Certified, CE Certified Storage Function (Temp. and Time) Locking Mode (Jog-Dial Input Disabled) Alarm (Error Status and Timer-end)	Others		Storage Function (Temp. and Time) Locking Mode (Jog-Dial Input Disabled)				
Net Weight (kg) 36 44 69 78	Net Weight (kg)		36	44	69	78	
	• • •		562×664×747	622×754×807	743×819×1,068	808×884×1,133	
Shipping Weight (kg) 43 59 79 92			43	59	,	,	
	Power Consumption		502 W	674 W	1390 W	1566 W	
Energy Consumption, at 100°C 90 Wh 117 Wh 187 Wh 204 Wh	Energy Consum	nption, at 100°C	90 Wh	117 Wh	187 Wh	204 Wh	
, at 150°C 181 Wh 230 Wh 337 Wh 398 Wh	, at 150°C		181 Wh	230 Wh	337 Wh	398 Wh	
Power Supply 120V, 60Hz or 230V, 50/60Hz	Power Supply		120V, 60Hz or 230V, 50/60Hz				

* Other Specifications are available upon Customer's Request.

<Continued on next page>

Cat. No

Description

Articles

<Continued from... Ovens, Gravity Convection-type, "WON">

Ordering Information

Standard Model, Gravity/Natural Flow, with Wire Shelves

DH.WON05032	Oven, Standard, 230V, 32 Lit., "WON-32", with Cord / Plug
DH.WON05050	, 50 Lit., "WON-50", with Cord / Plug
DH.WON05105	, 105 Lit., "WON-105", with Cord / Plug
DH.WON05155	, 155 Lit., "WON-155", with Cord / Plug
DH.WON06032	Oven, Standard, 120V , 32 Lit. , "WON-32 ", with Cord / Plug
DH.WON06050	, 50 Lit. , "WON-50 ", with Cord / Plug
DH.WON06105	, 105 Lit. , "WON-105 ", with Cord / Plug
DH.WON06155	, 155 Lit. , "WON-155 ", with Cord / Plug

Built in Viewing Window Model, Gravity/Natural Flow, with Wire Shelves

DH.WON07105	Oven, Window, 230V, 105 Lit., "WON-W105", with Cord / Plug
DH.WON07155	, 155 Lit., "WON-W155", with Cord / Plug
DH.WON08105	Oven, Window, 120V , 105 Lit., "WON-W105", with Cord / Plug
DH.WON08155	, 155 Lit., "WON-W155", with Cord / Plug

Spare Wire Shelves, Stainless Steel

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", <code>w520</code> $ imes$ d440mm

Validation (IQ, OQ) Service

-50
-105 -155
-W105 -W155

WiseRemote[®] Remote Control Software

Connection of *Wisd*.²² Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)

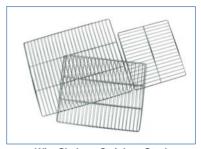




RS232C Cable & Software



Oven, Gravity/Natural Flow-type, Built in Viewing Window Model, with Wire Shelves "WON-W155"



Wire Shelves, Stainless Steel (Included)