

Incubators

- High Performance Heating Mechanism
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Over Temperature & Over Current Protection, Sensor Error Detection
- UL / CUL Certified - WIF, WIG, SWIF, SWIG, WIM and WIR models

- **General-type Incubators** P. 90~93
(Forced Convection, Gravity Convection)
- **Smart-type Incubators** P. 94~97
(Forced Convection, Gravity Convection)
- **Low Temperature (B.O.D) Incubators** P. 100~101
- **Multi-Room Incubator** P. 98~99
- **Shaking Incubator** P. 102~109
(Front Door- / Bench Top- / Top Door-type- / Multi-Stack)

❖ **Smart-type Incubator**
(SWIG / SWIF models)



❖ **General-type Incubator**
(WIG / WIF model)



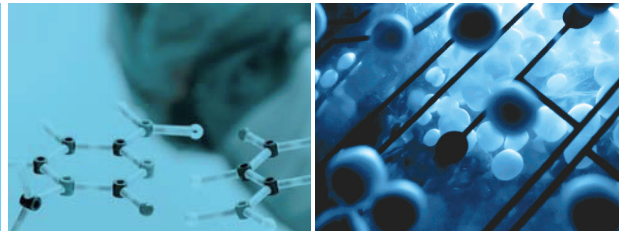
❖ **Multi-Room Incubator**
- Forced Convection Type (WIM model)



❖ **Precise Shaking Incubator**
- Front Door Type (WIS-30 model)



Features of witeg Incubators



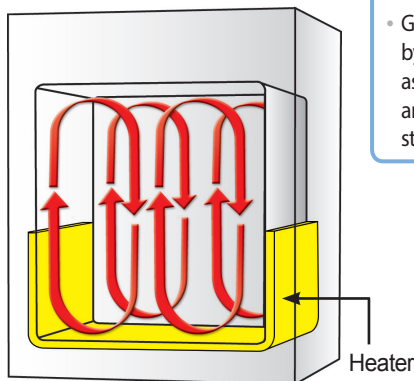
High Performance Heating Mechanism of witeg accomplishing world's best temperature accuracy and uniformity

The new types of Incubator of witeg are outfitted with high performance heating mechanism that is optimized respectively for capacity of chamber, power of heating element and air circulation type (Gravity Convection or Forced Convection).

The temperature displayed on the controller is accurately consistent with the actual temperature in the very center of the chamber or the average temperature in the entire area of the chamber, which maintains precisely within fluctuation specification. In addition, the temperature in the entire area of the chamber shows a very high stability keeping within a very slight variation specification in terms of temperature uniformity. Simultaneously, through the optimization of Fuzzy-PID controller, the heat-up time to reach the Set Temperature after operating and the recovery time to get back to the set temperature after opening and closing of the door are very short.

The newly developed high performance heating mechanism has achieved high degree of temperature accuracy and uniformity in the chamber. This is achieved by the heating elements installed on three sides - that is, the left, right and bottom parts of a chamber - which directly heat the stainless-steel chamber. This either enhances its material thermal conductivity to maximum (in case of the Incubator) or the heated air from the pre-heating zone in air-jacket type that is built in the three sides outside a chamber circulates first (in case of the Oven).

» Incubators

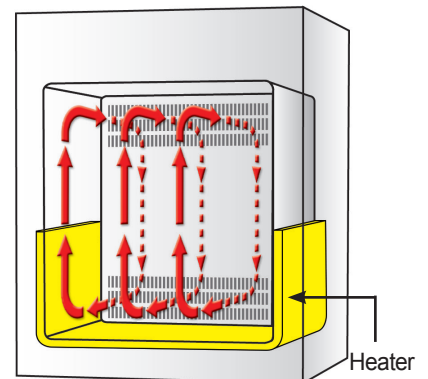


Gravity Convection

- Gravity convection is to be supplemented and maximized by way of forming radiant and conductive heat on the bottom as well as both sides of the chamber, while heating elements are fitted closely to the three sides outside the chamber by the steel structure of 1.5mm in thickness.

Forced Convection

- The same heating structure as Gravity Air-Flow model.
- Installs an air-flow room with a fan built in the back side of the chamber to achieve effective forced convection.
- Achieves high temperature uniformity and minimizes mutual contamination between samples by maintaining air flow in forced convection to top.



■ High Performance Heating Mechanism

The world's best performance and quality coming true via innovative heating mechanism !!

» Minimum

Fluctuation !

Minimization of Fluctuation in Temperature

Variation !

Minimization of spatial variation in temperature inside the chamber

Heat-up Time !

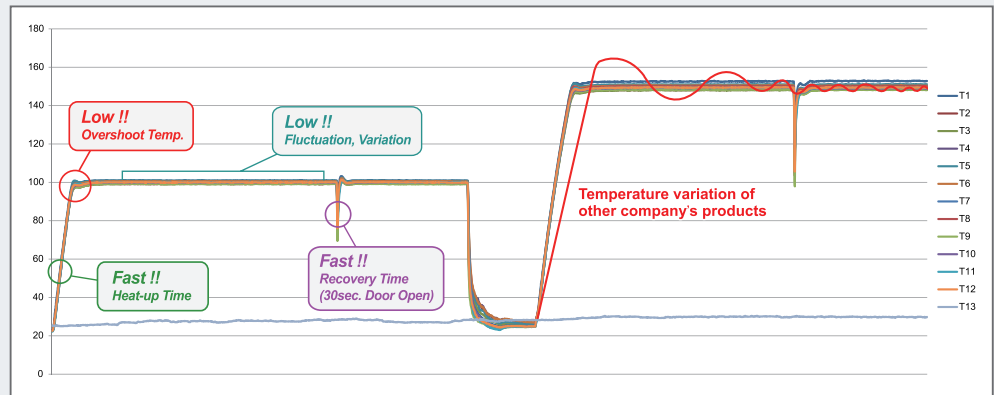
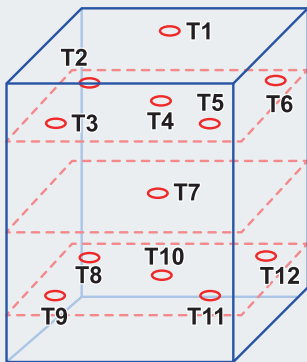
Minimization of reaching the set temperature

Overshoot !

Minimization of overshooting at the time of reaching the set temperature

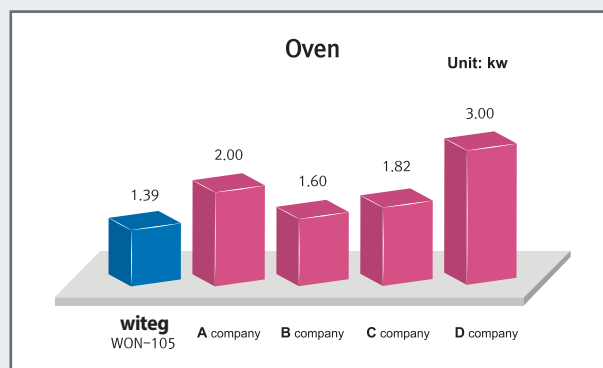
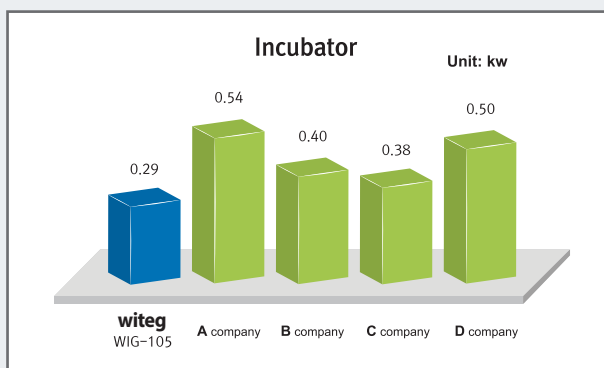
» Temperature Uniformity Completely Tested by ASTM Standards

All the units supplied by witeg Scientific are thoroughly tested, using 12 temperature sensors and the latest instruments to obtain validation, which corresponds to international standards. That is, Fluctuation and Variation (Uniformity) standards described in catalogues are actually guaranteed as the same.

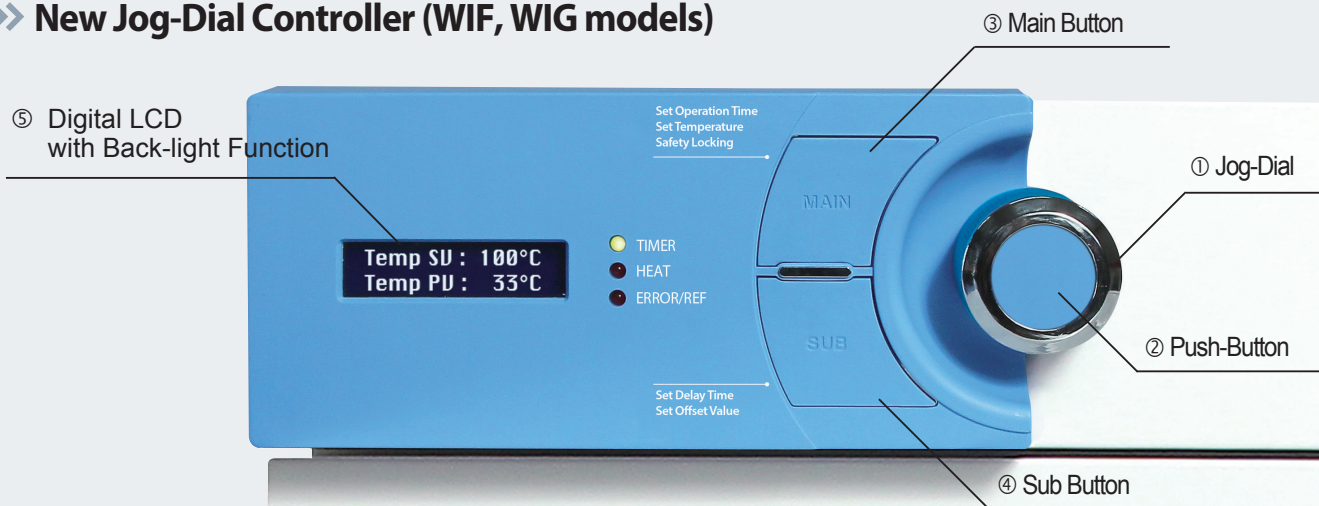


» Green Product

This is an environment-friendly product that achieves minimum power consumption by using heating element consuming minimum power for the capacity and temperature of the chamber, high-quality insulator and insulation structure, and complete door structure that guarantees shielding.



» New Jog-Dial Controller (WIF, WIG models)



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

witeg® Incubators, Forced Convection-type, “WIF”, 50-/105-/155 Lit., with Certi. & Traceability

With 2 X Wire Shelves, Digital Fuzzy Control, Jog-Dial with Push Button, Digital LCD with Backlight, up to 70°C, ±0.2°C



Incubator, Forced Convection-type “WIF-105”

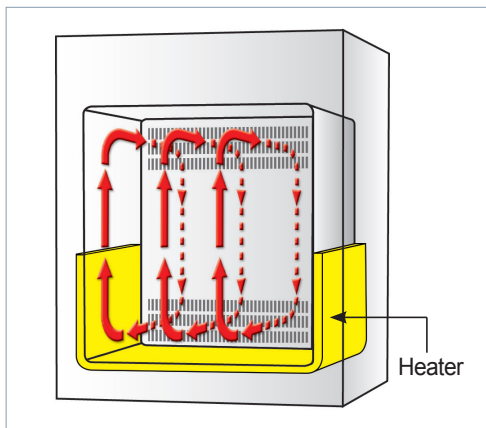
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optimized Air Flow by Forced Convection Mechanism
- Patented Jog-Dial Control System
- UL / CUL Certified ■ CE Certified
- PL (Product Liability) Insurance

- * Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on
- * The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism : 3-Side Heating
- * Optimized Air Flow by Forced Convection Mechanism
- * Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- * New Jog-Dial with Push Button * Compact New Body Design
- * 2 ea of PTFE-coated Steel Wire Shelves Included
- * Alarm Function : Error status and Timer-end
- * RS232C Interface for Monitoring and Controlling with PC
- * Ambient to 70°C of Temp. Range, Fluctuation of ±0.2°C at 37°C, 50°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
- * Incubator Temperature & Incubator Current Protection, Sensor Error Detection

Specification

Capacity & Models		50 Lit. “WIF-50”	105 Lit. “WIF-105”	155 Lit. “WIF-155”
Dimension (w x d x h)	Interior (mm)	350 X 370 X 535	410 X 485 X 535	475 X 500 X 600
	Exterior (mm)	518 X 637 X 699	635 X 695 X 841	700 X 760 X 903
Heater Power		200W	300W	400W
Temp.	Range	Ambient Temperature +5°C to 70°C		
	Fluctuation	± 0.2°C at 37°C, ± 0.3°C at 50°C		
	Variation	± 0.5°C at 37°C, ± 0.9°C at 50°C	± 0.4°C at 37°C, ± 0.7°C at 50°C	
	Sensor	PT 100		
Control Resolution		±0.1°C		
Heat-up Time		17 min. to 37 °C, 28 min. to 50°C	17 min. to 37°C, 30 min. to 50°C	
Recovery Time (Door open 30sec)		3 min. to 37°C, 4 min. to 50°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	Stainless Steel (#304)		
	External	Powder Coated Steel		
	Inner Door	Inner Tempered Glass Door		
Shelves		2ea of PTFE-coated Steel Wire Shelves included		
Ventilation		1ea of Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm		
Circulation		Forced Air Type		
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)		
Net Weight (kg)		46	66	81
Packing Size (w x d x h) (mm)		628 X 752 X 775	710 X 731 X 1,018	731 X 810 X 1,018
Shipping Weight (kg)		58	74	92
Power Consumption		216.3 W	302.9 W	438.1 W
Energy Consumption, at 37 C , at 50 C		28 Wh	43 Wh	58 Wh
		84 Wh	129 Wh	145 Wh
Power plug type		Hybrid E+F		
Power Supply*		AC 230V, 1N~, 50/60Hz		

* Other Specifications are available upon Customer s Request.



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

<Continued on next page>

<Continued from...Incubators, Forced Convection-type, "WIF">

Ordering Information

- DH.WIF03050 Incubator, Forced Convection, 230V, 50 Lit., "WIF-50"
- DH.WIF03105 , 105 Lit., "WIF-105"
- DH.WIF03155 , 155 Lit., "WIF-155"

Spare Wire Shelves, PTFE Coated Steel

- DH.WIG11050 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 50 Lit., "IGS050", w340 x d310mm
- DH.WIG11105 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 105 Lit., "IGS105", w455 x d375mm
- DH.WIG11155 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 155 Lit., "IGS155", w520 x d440mm

Optional Wire Shelves, Stainless Steel

- DH.WON11050 Wire Shelf, Stainless Steel, with 2 Brackets, for 50 Lit., "ONS050", w340 x d310mm
- DH.WON11105 Wire Shelf, Stainless Steel, with 2 Brackets, for 105 Lit., "ONS105", w455 x d375mm
- DH.WON11155 Wire Shelf, Stainless Steel, with 2 Brackets, for 155 Lit./305Lit., "ONS155", w520 x d440mm

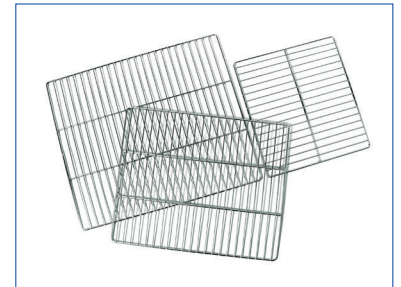
Validation (IQ, OQ) Service

- DH.WIF31050 Validation Service(IQ, OQ), "IFV050", for "WIF-50"
- DH.WIF31105 , "IFV105", for "WIF-105"
- DH.WIF31155 , "IFV155", for "WIF-155"



2-Year Warranty

Incubator, Forced Convection-type "WIF-105"



Wire Shelves, Stainless Steel (Optional)

WiseRemote® Remote Control Software
 Connection of **Wisd** Temperature Devices with Interface RS232C
 to a PC Export Recorded Data (Excel Spreadsheet)



Main Screen



RS232C Cable & Software

witeg® Incubators, Gravity Convection-type, "WIG", 32-/50-/105-/155 Lit., with Certi. & Traceability

With 2 X Wire Shelves, Digital Fuzzy Control, Jog-Dial with Push Button, Digital LCD with Backlight, up to 70°C, ±0.2°C



Incubator, Gravity Convection-type "WIG-105"

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optimized Air Circulation by Natural Flow preventing Cross Contamination of Samples
- Patented Jog-Dial Control System
- UL / CUL Certified ■ CE Certified
- PL (Product Liability) Insurance

- * Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on
- * The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism : 3-Side Heating
- * Optimized Air Circulation by Natural Flow preventing Cross Contamination of Samples
- * Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- * New Jog-Dial with Push Button * Compact New Body Design
- * 2 ea of PTFE-coated Steel Wire Shelves included
- * RS232C Interface for Monitoring and Controlling with PC
- * Ambient to 70°C of Temp. Range, Fluctuation of ±0.2°C at 37°C, 50°C
- * Alarm Function : Error status and Timer-end
- * 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
- * Incubator Temperature & Incubator Current Protection, Sensor Error Detection

Specification

Capacity & Models		32 Lit. "WIG-32"	50 Lit. "WIG-50"	105 Lit. "WIG-105"	155 Lit. "WIG-155"
Dimension (w x d x h)	Interior (mm)	310 x 290 x 360	370 x 350 x 420	485 x 410 x 535	550 x 475 x 600
	Exterior (mm)	458 x 477 x 662	518 x 545 x 722	633 x 595 x 879	700 x 660 x 903
Heater Power		150W	200W	300W	400W
Temp.	Range	Ambient Temperature +5°C to 70°C			
	Fluctuation	± 0.2°C at 37°C, ±0.3°C at 50°C			
	Variation	± 0.6°C at 37°C, ±1.0°C at 50°C			
	Sensor	PT 100			
Control Resolution		±0.1°C			
Heat-up Time		25 min. to 37 °C , 40 min. to 50 °C			30 min. to 37 °C , 40 min. to 50 °C
Recovery Time (Door open 30sec)		8 min. to 37 °C 12 min. to 50 °C		10 min. to 37 °C 15 min. to 50 °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	Stainless Steel (#304)			
	External	Powder Coated Steel			
	Inner Door	Inner Tempered Glass Door			
Shelves		2ea of PTFE-coated Steel Wire Shelves included			
Ventilation		1ea of Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm			
Circulation		Gravity Convection Type			
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)			
Net Weight (kg)		32	40	59	71
Packing Size (w x d x h) (mm)		568 x 592 698	628 x 652 x 775	731 x 710 x 1,018	796 x 775 x 1,083
Shipping Weight (kg)		39	53	67	78
Power Consumption		159 W	169.9 W	292.9 W	420.5 kW
Energy Consumption, at 37 C , at 50 C		34 Wh	41 Wh	63 Wh	99 Wh
		81 Wh	103 Wh	152 Wh	212 Wh
Power plug type		Hybrid E+F			
Power Supply*		AC 230V, 1N~, 50/60Hz			

* Other Specifications are available upon Customer s Request.

<Continued on next page>

Cat. No	Description	Articles
---------	-------------	----------

<Continued from...Incubators, Gravity Convection-type, "WIG" >

Ordering Information

- DH.WIG03032 Incubator, Gravity / Natural Flow-type, **230V, 32 Lit., "WIG-32"**
- DH.WIG03050 , **50 Lit., "WIG-50"**
- DH.WIG03105 , **105 Lit., "WIG-105"**
- DH.WIG03155 , **155 Lit., "WIG-155"**

Spare Wire Shelves, PTFE Coated Steel

- DH.WIG11032 Wire Shelf, PTFE Coated Steel, with 2 Brackets, **for 32 Lit., "IGS032"**, w280 x d260mm
- DH.WIG11050 Wire Shelf, PTFE Coated Steel, with 2 Brackets, **for 50 Lit., "IGS050"**, w340 x d310mm
- DH.WIG11105 Wire Shelf, PTFE Coated Steel, with 2 Brackets, **for 105 Lit., "IGS105"**, w455 x d375mm
- DH.WIG11155 Wire Shelf, PTFE Coated Steel, with 2 Brackets, **for 155 Lit., "IGS155"**, w520 x d440mm

Optional Wire Shelves, Stainless Steel

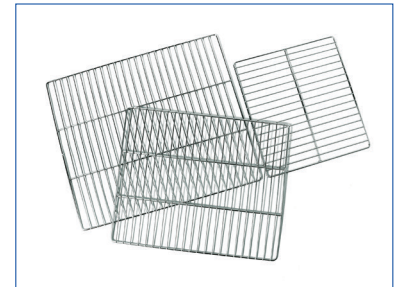
- DH.WIG12032 Wire Shelf, Stainless Steel, with 2 Brackets, **for 32 Lit., "IGSN032"**, w280 x d260mm
- DH.WON11050 Wire Shelf, Stainless Steel, with 2 Brackets, **for 50 Lit., "ONS050"**, w340 x d310mm
- DH.WON11105 Wire Shelf, Stainless Steel, with 2 Brackets, **for 105 Lit., "ONS105"**, w455 x d375mm
- DH.WON11155 Wire Shelf, Stainless Steel, with 2 Brackets, **for 155 Lit./305Lit., "ONS155"**, w520 x d440mm

Validation (IQ, OQ) Service

- DH.WIG31032 Validation Service(IQ, OQ), **"IGV032"**, for **"WIG-32"**
- DH.WIG31050 , **"IGV050"**, for **"WIG-50"**
- DH.WIG31105 , **"IGV105"**, for **"WIG-105"**
- DH.WIG31155 , **"IGV155"**, for **"WIG-155"**



2-Year Warranty
Incubator, Gravity Convection-type "WIG-105"



Wire Shelves, Stainless Steel (Optional)

WiseRemote® Remote Control Software
Connection of **Wisd** Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)



Main Screen



RS232C Cable & Software

witeg® Incubators, Forced Convection-type, SWIF , 50-/105-/155 Lit., with Certi. & Traceability with Smart-Lab™ Controller, 4" Full Touch Screen, Fuzzy-PID Control, up to 70°C, ±0.2°C



Incubator, Forced Convection-type "SWIF-105"

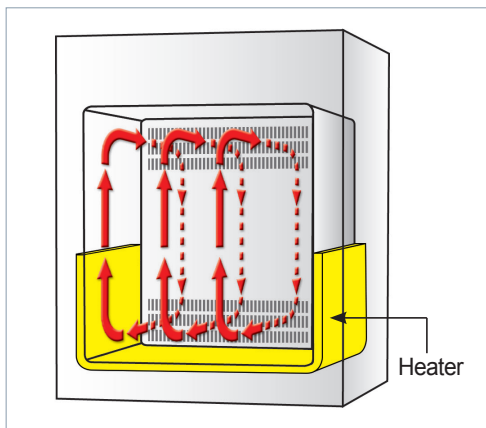
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optimized Air Flow by Forced Convection Mechanism
- Smart-Lab™ Controller
- UL / CUL Certified
- CE Certified
- PL(Product Liability) Insurance

- * Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on
- * The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism: 3-Side Heating
- * Optimized Air Flow by Forced Convection Mechanism
- * Ergonomic Design 4" Full Touch Screen TFT LCD(Smart-Lab™ Controller)
- * WiRe™ App & Web Service. * Automatic Data Recording
- * Self-Diagnostic Function * Internet Connectivity with WiFi
- * Variable Program Setting for Multiple Patterns with Multiple Segments
- * The Recorded Data Could be transferred to PC by USB memory
- * Compact New Body Design * Controller SW can be upgraded through USB port.
- * 2ea of PTFE-coated Steel Wire Shelves Included
- * RS232C Interface for Monitoring and Controlling with PC
- * Ambient to 70°C of Temp. Range, Fluctuation of ±0.2°C at 37°C, 50°C
- * Corrosion Resistant 304 Stainless Steel Chamber
- * Incubator Temperature & Incubator Current Protection, Sensor Error Detection

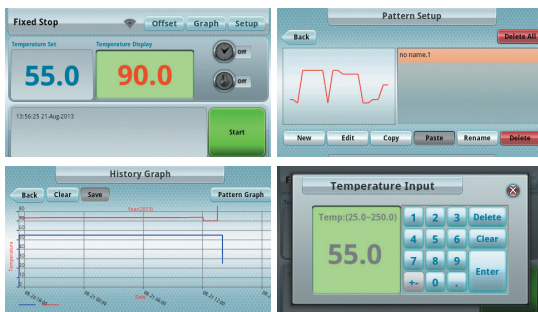
Specification

Capacity & Models		50 Lit. "SWIF-50"	105 Lit. "SWIF-105"	155 Lit. "SWIF-155"
Dimension (w x d x h)	Interior (mm)	350 x 370 x 535	410 x 485 x 535	475 x 500 x 600
	Exterior (mm)	518 x 637 x 699	635 x 695 x 841	700 x 760 x 903
Heater Power		200W	300W	400W
Temp.	Range	Ambient Temperature +5°C to 70°C		
	Fluctuation	± 0.2°C at 37°C, ±0.3°C at 50°C		
	Variation	±0.5°C at 37°C, ± 0.9°C at 50°C	± 0.4°C at 37°C, ± 0.7°C at 50°C	
	Sensor	PT 100		
Control Resolution		±0.1°C		
Heat-up Time		17 min. to 37°C, 28 min. to 50°C	17 min. to 37°C, 30 min. to 50°C	
Recovery Time(Door open 30sec)		3 min. to 37°C, 4 min. to 50°C		
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)		
Material	Internal	Stainless Steel (#304)		
	External	Powder Coated Steel		
	Inner Door	Inner Tempered Glass Door		
Shelves		2ea of PTFE-coated Steel Wire Shelves included		
Ventilation		1ea of Ventilation hole with Stainless Steel Cap, Hole Diameter 40mm		
Circulation		Forced Air Type		
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)		
Net Weight (kg)		46	66	81
Packing Size (w x d x h) (mm)		628 x 752 x 775	710 x 731 x 1,018	731 x 810 x 1,018
Shipping Weight (kg)		58	74	92
Power Consumption		216.3 W	302.9 W	438.1 W
Energy Consumption, at 37 C , at 50 C		28 Wh	43 Wh	58 Wh
		84 Wh	129 Wh	145 Wh
Power plug type		Hybrid E+F		
Power Supply*		AC 230V, 1N~, 50/60Hz		

* Other Specifications are available upon Customer s Request.



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



Display of Smart-Lab™ Controller

※ See page 8~13 for the Feature of Smart-Lab™ System

<Continued on next page>

Cat. No	Description	Articles
---------	-------------	----------

<Continued from... Incubators, Forced Convection-type, "SWIF">

Ordering Information

- DH.SWIF03050 Incubator, Forced Convection, **230V, 50 Lit., "SWIF-50"**
- DH.SWIF03105 , **105 Lit., "SWIF-105"**
- DH.SWIF03155 , **155 Lit., "SWIF-155"**

Spare Wire Shelves, PTFE Coated Steel

- DH.WIG11050 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for **50 Lit.**, "IGS050", w340 x d310mm
- DH.WIG11105 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for **105 Lit.**, "IGS105", w455 x d375mm
- DH.WIG11155 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for **155 Lit.**, "IGS155", w520 x d440mm

Optional Wire Shelves, Stainless Steel

- DH.WON11050 Wire Shelf, Stainless Steel, with 2 Brackets, for **50 Lit.**, "ONS050", w340 x d310mm
- DH.WON11105 Wire Shelf, Stainless Steel, with 2 Brackets, for **105 Lit.**, "ONS105", w455 x d375mm
- DH.WON11155 Wire Shelf, Stainless Steel, with 2 Brackets, for **155 Lit. / 305Lit.**, "ONS155", w520 x d440mm

Validation (IQ, OQ) Service

- DH.SWIF31050 Validation Service(IQ, OQ), "SIFV050", for **SWIF-50**
- DH.SWIF31105 , "SIFV105", for **SWIF-105**
- DH.SWIF31155 , "SIFV155", for **SWIF-155**

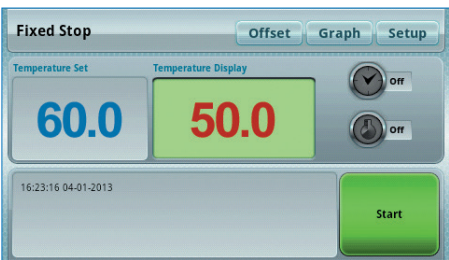


2-Year Warranty

Wisd

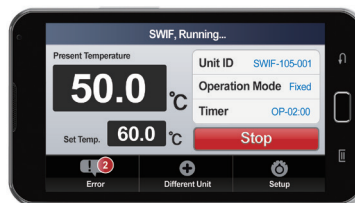
Incubator, Forced Convection-type "SWIF-105"

>> witeg WiRe™ App & Web Service



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

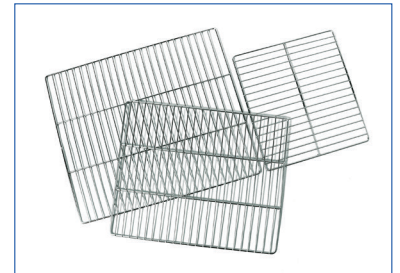
It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet and web without restraint of time and place.



WiRe™ App & Web Service



Wire Shelves, PTFE Coated Steel (Included)



(1) Wire Shelves, Stainless Steel (Optional)

Cat. No	Description	Articles
---------	-------------	----------

<Continued from... Incubators, Gravity Convection-type, "SWIG">

Ordering Information

- DH.SWIG03032 Incubator, Gravity / Natural Flow-type, 230V, 32 Lit., "SWIG-32"
- DH.SWIG03050 , 50 Lit., "SWIG-50"
- DH.SWIG03105 , 105 Lit., "SWIG-105"
- DH.SWIG03155 , 155 Lit., "SWIG-155"

Spare Wire Shelves, PTFE Coated Steel

- DH.WIG11032 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 32 Lit., "IGS032", w280 x d260mm
- DH.WIG11050 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 50 Lit., "IGS050", w340 x d310mm
- DH.WIG11105 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 105 Lit., "IGS105", w455 x d375mm
- DH.WIG11155 Wire Shelf, PTFE Coated Steel, with 2 Brackets, for 155 Lit., "IGS155", w520 x d440mm

Optional Wire Shelves, Stainless Steel

- DH.WIG12032 Wire Shelf, Stainless Steel, with 2 Brackets, for 32 Lit., "IGSN032", w280 x d260mm
- DH.WON11050 Wire Shelf, Stainless Steel, with 2 Brackets, for 50 Lit., "ONSO50", w340 x d310mm
- DH.WON11105 Wire Shelf, Stainless Steel, with 2 Brackets, for 105 Lit., "ONS105", w455 x d375mm
- DH.WON11155 Wire Shelf, Stainless Steel, with 2 Brackets, for 155 Lit./305Lit., "ONS155", w520 x d440mm

Validation (IQ, OQ) Service

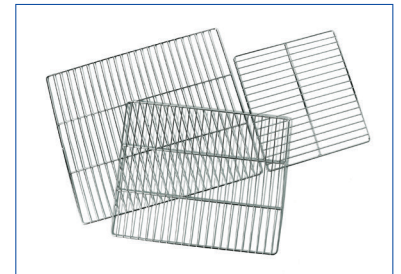
- DH.SWIG31032 Validation Service(IQ, OQ), "SIGV032", for "SWIG-32"
- DH.SWIG31050 , "SIGV050", for "SWIG-50"
- DH.SWIG31105 , "SIGV105", for "SWIG-105"
- DH.SWIG31155 , "SIGV155", for "SWIG-155"



2-Year Warranty **Wisd**
Incubator, Gravity Convection-type "SWIG-105"



Wire Shelves, PTFE Coated Steel (Included)



(1) Wire Shelves, Stainless Steel (Optional)

» witeg WiRe™ App & Web 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 and web without restraint of time and place.



WiRe™ App & Web Service

<Continued from... Multi-Room Incubator, "WIM">

Ordering Information

"WIM-4" with 125 Lit. x 4 Rooms, Ambient +5°C~70°C

DH.WIM04125 Multi-Room Incubator, 230V, "WIM-4"

"WIM-R4" with 125 Lit. x 4 Rooms, 0~60°C

DH.WIM16125 Multi-Room Incubator, 400V, 3N~, "WIM-R4"

"WIM-RL4" with 125 Lit. x 4 Rooms & Illumination, 0~60°C

DH.WIM26125 Multi-Room Incubator, 400V, 3N~, "WIM-RL4"

Spare Wire Shelves

DH.WIM34125 Wire Shelf, PTFE Coated Steel, with 2 Brackets, IMS125
w470 x d480mm, for "WIM" 4-Room Incubators

Optional Wire Shelves

DH.WIM34126 (1) Wire Shelf, Stainless Steel, with 2 Brackets, IMS126,
w470 x d480mm, for "WIM" 4-Room Incubators

Validation (IQ, OQ) Service

DH.WIM54125 Validation Service(IQ, OQ), "IMV525", for "WIM-4"

DH.WIM64125 , "IMV625", for "WIM-R4"

DH.WIM74125 , "IMV725", for "WIM-RL4"



Multi-Room Incubator, Forced Convection Type "WIM-R4"

WiseRemote® Remote Control Software

Connection of Wisdom Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)



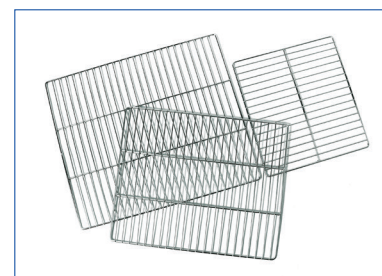
Main Screen



RS232C Cable & Software



Wire Shelves, PTFE Coated Steel (Included)



(1) Wire Shelves, Stainless Steel (Optional)

witeg® Low Temperature (B.O.D) Incubators, “WIR”, 150-/250-/420-/700- Lit., with Certi. & Traceability with 3 X Wire Shelves, Digital Fuzzy Control, CFC-free Refrigeration(404A) System, Forced Convection, 0~60°C, ±0.2°C



Low Temperature(B.O.D) Incubator “WIR-150”

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Intelligent Control of Refrigerator for Preventing Overload of Compressor
- CFC-free (404A) Refrigeration System
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- **Patented Jog-Shuttle Control System**
- **UL/CUL Certified** ■ **CE Certified**
- **PL(Product Liability) Insurance**

- * Variable Application : Animal & Plant Cell Culture, Constant Temperature, Germination Test, BOD Test, and so on
- * RS232C Interface for Monitoring and Controlling with PC
- * Superior Temperature Uniformity by Forced Convection
- * Stainless Steel Chamber and PTFE-Coated Shelves - Corrosion Resistance
- * Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.
- * Storage Function : Alarm & Timer * Back-Light LCD
- * Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
- * CFC-free (404A) Refrigeration System.

Specification

Capacity & Models	150 Lit. “WIR-150”	250 Lit. “WIR-250”	420 Lit. “WIR-420”	700 Lit. “WIR-700”	
Circulation-type	Forced Air-type				
Temp. Range & Accuracy	0 °C ~ 60 °C, ±0.2°C at 37°C				
Temp. Uniformity & Sensor	±0.5°C at 37°C, ±1.4°C at 50°C, PT100 Sensor				
Heat-up Time	20 min. to 37°C 20 min. to 50°C		35 min. to 37°C 35 min. to 50°C		
Recovery Time (Door open 30sec)	10 min. to 37°C 12 min. to 50°C		12 min. to 37°C 15 min. to 50°C		
Heating Power/Consumption	700 W	1 kW	1.2 kW	2 kW	
Compressor	1/4 HP	1/3 HP	5/8 HP	3/4HP	
Compressor Control	Intelligent Control of Refrigerator for preventing Overload of Compressor				
Refrigerant	CFC-Free(404A) Refrigeration System				
Timer & Alarm	99hr 59min (with delay / Continuous run.), Error status & Timer-end				
Display	Digital LCD with Back Light				
Controller	Digital Fuzzy Controller with Jog-Shuttle Switch (Turn & Push)				
Inner Door	with 1ea of Inner Tempered Glass Door				
Shelves	Included 3ea of PTFE-coated Steel Shelves				
Permitted Total Load	Total Load : 48 kg (16kg x 3 Shelves)				
Safety Circuit	Over Temp. and Over Current Protector, Sensor Error Detector				
Material	Internal : Stainless Steel (#304), External : Powder Coated Steel				
Dimension (w x d x h)	Interior (mm)	505 x 505 x 610	505 x 505 x 1,000	705 x 605 x 1,000	800 x 700 x 1,250
	Exterior (mm)	640 x 832 x 1,313	640 x 832 x 1,703	840 x 932 x 1,753	935 x 1,027 x 2,000
Net Weight	118 kg	157 kg	202 kg	234 kg	
Packing Size (w x d x h) (mm) & Gross Weight	900 x 1,000 x 1,650 191 kg	900 x 1,000 x 2,040 217 kg	1,100 x 1,100 x 2,140 277 kg	1,220 x 1,220 x 2,260 313 kg	
Power Consumption	1.6 kW	1.8 kW	2.3 kW	2.4 kW	
Power plug type	Hybrid E+F				
Power Supply*	AC 230V, 1N~, 50/60Hz				

* Other Specifications are available upon Customer s Request.

Ordering Information

- DH.WIR01150 Low Temperature(B.O.D) Incubator, **230V**, 150 Lit., “WIR-150”
- DH.WIR01250 , 250 Lit., “WIR-250”
- DH.WIR01420 , 420 Lit., “WIR-420”
- DH.WIR01700 , 700 Lit., “WIR-700”

<Continued on next page>

Cat. No	Description	Articles
---------	-------------	----------

<Continued from... Low Temperature (B.O.D) Incubators, "WIR">

Spare Wire Shelves, PTFE Coated Steel

- DH.WIR11150 Wire Shelf, PTFE Coated Steel, "IRS150", w470 x d480mm, for "WIR-150", "WIR-250"
- DH.WIR11420 , "IRS420", w675 x d585mm, for "WIR-420"
- DH.WIR11700 , "IRS700", w770 x d680mm, for "WIR-700"

Optional Wire Shelves, Stainless Steel

- DH.WIR21150 (1) Wire Shelf, Stainless Steel, "IRU150", w470 x d480mm, for "WIR-150", "WIR-250"
- DH.WIR21420 "IRU420", w675 x d585mm, for "WIR-420"
- DH.WIR21700 "IRU700", w770 x d680mm, for "WIR-700"

Validation (IQ, OQ) Service

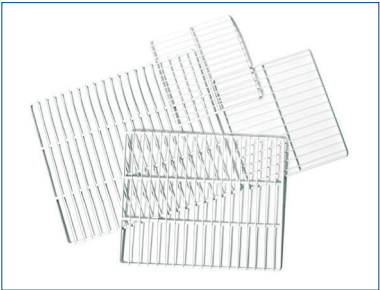
- DH.WIR31150 Validation Service(IQ, OQ), "IRV150", for "WIR-150"
- DH.WIR31250 , "IRV250", for "WIR-250"
- DH.WIR31420 , "IRV420", for "WIR-420"
- DH.WIR31700 , "IRV700", for "WIR-700"



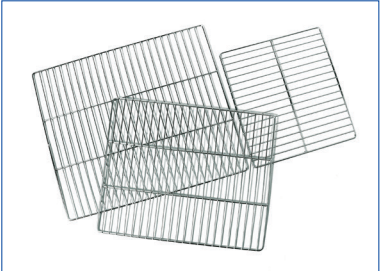
2-Year Warranty **Wisd**
Low Temperature(B.O.D) Incubator "WIR-150"

WiseRemote® Remote Control Software
 Connection of **Wisd** Temperature Devices with Interface RS232C
 to a PC Export Recorded Data (Excel Spreadsheet)

Main Screen
RS232C Cable & Software



Wire Shelves, PTFE Coated Steel
(Included)



(1) Wire Shelves, Stainless Steel
(Optional)

witeg® Precise Shaking Incubator, “WIS-30”, Front Door-type, Orbital Motion, up to 60°C
with Universal Platform, Digital Fuzzy Control, Advanced Shaking Mechanism, Precise Speed Control, 30~250 rpm



WisD **2-Year Warranty**
Precise Shaking Incubator, Front Door Type “WIS-30”
with Universal Platform

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Biological Cultures under various Temperature
- **Patented Jog-Shuttle Control System**
- CE Certified ■ **PL(Product Liability) Insurance**

- * Useful for Biological Cultures under various Temperature
- * Precise Temperature Control by Digital Fuzzy Controller, up to 60°C
- * Digital Timer Function : 99 hours 59 minutes
- * Front Door and Sliding Platform Provides Easy Loading and Handling of Samples
- * Digital LCD with Back-Light Function
- * Stabilized Orbital Motion
- * RS232C Interface for Monitoring and Controlling with PC.
- * Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
- * Minimum Noise and No Vibration.
- * Accommodate Flasks up to 1,000ml
- * Universal Spring Rack for Various Shapes/Size of Flasks (Optional)
- * Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
- * Over Temperature & Over Current Protection and Leakage Breaking.

Specification

Temp. Range & Model	Ambient +5°C ~ 60°C “WIS-30”	10°C ~ 60°C “WIS-30R”
Temp. Accuracy & Uniformity	Accuracy : ±0.2°C at 37°C,	Uniformity : ±0.5°C at 37°C
Temp. Sensor	PT100 Sensor	
Heater	600 W	800 W
Compressor	None	1/4 HP
Compressor Control	None	Intelligent Control of Refrigerator for preventing Overload of Compressor
Refrigerant	None	CFC-Free(134A) Refrigeration System
Shaking Speed & Stroke	30 ~ 250 rpm, 25mm Orbital Motion	
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end	
Display	Digital LCD with Back-Light Function	
Controller	Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Platform	Included Universal Platform for Various Shapes & Sizes of Flasks	
Optional Flask Holder	Durable & Flexible Plastic Flask Holder (up to 1000ml)	
Available Max. Capacity of Flask Holder	for 50~100ml	Available 35 ea Flask Holder “FH100”, for 50~100ml Flask
	for 200~300ml	Available 16 ea Flask Holder “FH250”, for 200~300ml Flask
	for 500~1,000ml	Available 12 ea Flask Holder “FH500”, for 500~1,000ml Flask
Safety Circuit	Over Temp./ Current Protector, Leakage Breaker	
Material	Internal : Stainless Steel (#304), External : Powder Coated Steel	
Dimension	Internal : 570 x 465 x h470mm, External : 916 x 730 x h683mm	
Packing Size (w x d x h) (mm)	1,050 x 900 x h900mm	
& Gross Weight	146 kg	156 kg
Power Consumption	600 W	1.3 kW
Power plug type	Hybrid E+F	
Power Supply*	AC 230V, 1N~, 50/60Hz	

* Other Specifications are available upon Customer s Request.

Ordering Information

Ambient +5°C~ +60°C, with Universal Platform, “WIS-30”

DH.WIS03010 Front Door-type Shaking Incubator, 230V, “WIS-30”

+10°C~ +60°C, with Universal Platform, “WIS-30R”

DH.WIS03011 Front Door-type Shaking Incubator, 230V, “WIS-30R”

<Continued on next page>

Cat. No	Description	Articles
---------	-------------	----------

<Continued from... Precise Shaking Incubator, "WIS-30">

Optional Platform/Spring Rack/Flask Holders

- DH.WIS504630 (1) Universal Platform, w485 x h405mm, "SP630", for WIS-30(R)
- DH.WIS504530 (2) Universal Spring Rack w498 x d408 x h135mm, "SR530", for WIS-30(R)
- DH.WIS504030 (3) Flask Holder, for 50~100ml Flask, "FH100", for "SHO", "SHR" and "WIS"
- DH.WIS504035 (4) , for 200~300ml Flask, "FH250", for "SHO", "SHR" and "WIS"
- DH.WIS504040 (5) , for 500~1000ml Flask, "FH500", for "SHO", "SHR" and "WIS"

Validation (IQ, OQ) Service

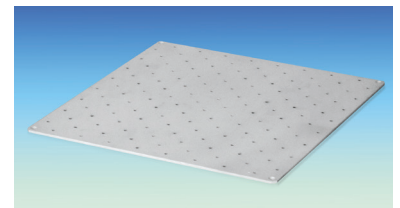
- DH.WIS33010 Validation Service(IQ, OQ), "ISV3010", for "WIS-30"
- DH.WIS33011 , "ISV3011", for "WIS-30R"



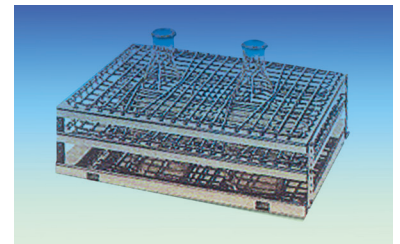
Precise Shaking Incubator, Front Door Type WIS-30 with Universal Platform

WiseRemote® Remote Control Software
 Connection of **Wisd** Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)

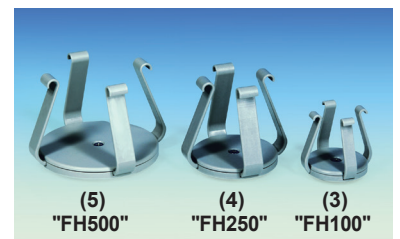
Main Screen RS232C Cable & Software



(1) Universal Platform "SP630" (Included)



(2) Universal Spring Rack "SR530" (Optional)



(5) "FH500" (4) "FH250" (3) "FH100"

Flask Holders (Optional)

witeg® Precise Shaking Incubator, WIS-20 , BenchTop-type, Orbital Motion, up to 60°C
with Universal Platform, Digital Fuzzy Control, Advanced Shaking Mechanism, Precise Speed Control, 30~250 rpm



Precise Shaking Incubator, Bench Top-type "WIS-20R" with Universal Platform

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Biological Cultures under various Temperature
- Patented Jog-Shuttle Control System
- CE Certified
- PL(Product Liability) Insurance

- * Useful for Biological Cultures under various Temperature
- * Precise Temperature Control by Digital Fuzzy Controller, up to 60°C
- * Digital Timer Function : 99 hours 59 minutes
- * Minimum Noise and No Vibration
- * Digital LCD with Back-Light Function
- * Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
- * Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
- * Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking
- * Accommodate Flasks up to 1,000ml
- * Stabilized Orbital Motion
- * RS232C Interface for Monitoring and Controlling with PC
- * Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

Specification

Temp. Range & Model	Ambient +5°C ~ 60°C "WIS-20"	10°C ~ 60°C "WIS-20R"
Temp. Accuracy & Uniformity	Accuracy : ±0.2°C at 37°C, Uniformity : ±0.5°C at 37°C	
Temp. Sensor	PT100 Sensor	
Heater	500 W	700 W
Compressor	None	1/4 HP
Compressor Control	None	Intelligent Control of Refrigerator for preventing Overload of Compressor
Refrigerant	None	CFC-Free(134A) Refrigeration System
Shaking Speed & Stroke	30 ~ 250 rpm, 25mm Orbital Motion	
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end	
Display	Digital LCD with Back-Light Function	
Controller	Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Room Lamp	60W Krypton Lamp	
Platform	Included Universal Platform for Various Shapes & Sizes of Flasks	
Optional Flask Holder	Durable & Flexible Plastic Flask Holder (up to 1000ml)	
Available Max. Capacity of Flask Holder	for 50~100ml for 200~300ml for 500~1,000ml	Available 32 ea Flask Holder FH100 , for 50~100ml Flask Available 20 ea Flask Holder FH250 , for 200~300ml Flask Available 16 ea Flask Holder FH500 , for 500~1,000ml Flask
Safety Circuit	Over Temp./ Current Protector, Leakage Breaker, Sensor Error Detector	
Material	Internal : Stainless Steel (#304), External : Powder Coated Steel	
Dimension	Internal : 530 x 530 x h350mm, External : 575 x 855 x h850mm	
Packing Size (w x d x h) (mm)	1,000 x 800 x h1,100mm	
& Gross Weight	147 kg	150 kg
Power Consumption	500 W	1.2 kW
Power plug type	Hybrid E+F	
Power Supply*	AC 230V, 1N~, 50/60Hz	

* Other Specifications are available upon Customer s Request.

Ordering Information

Ambient +5°C~ +60°C, with Universal Platform, "WIS-20"

DH.WIS02010 Bench Top-type Shaking Incubator, 230V, "WIS-20"

+10°C~+60°C, with Universal Platform, "WIS-20R"

DH.WIS02011 Bench Top-type Shaking Incubator, 230V, "WIS-20R"

<Continued on next page>

Cat. No	Description
---------	-------------

Articles

<Continued from... Precise Shaking Incubator, "WIS-20">

Optional Platform/Spring Rack/Flask Holders

- DH.WIS504600 (1) Universal Platform, w478 x h478mm, "SP600", for "WIS-20(R)"
- DH.WIS504500 (2) Universal Spring Rack w483 x d483 x h135mm, "SR500", for "WIS-20(R)"
- DH.WIS504030 (3) Flask Holder, for 50~100ml Flask, "FH100", for "SHO", "SHR" and "WIS"
- DH.WIS504035 (4) , for 200~300ml Flask, "FH250", for "SHO", "SHR" and "WIS"
- DH.WIS504040 (5) , for 500~1000ml Flask, "FH500", for "SHO", "SHR" and "WIS"

Validation (IQ, OQ) Service

- DH.WIS32010 Validation Service(IQ, OQ), "ISV2010", for "WIS-20"
- DH.WIS32011 , "ISV2011", for "WIS-20R"




2-Year Warranty




Precise Shaking Incubator, Bench Top-type WIS-20R with Universal Platform

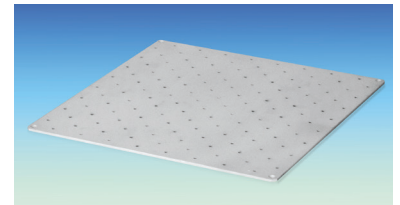
WiseRemote® Remote Control Software
 Connection of **Wisd** Temperature Devices with Interface RS232C to a PC Export Recorded Data (Excel Spreadsheet)



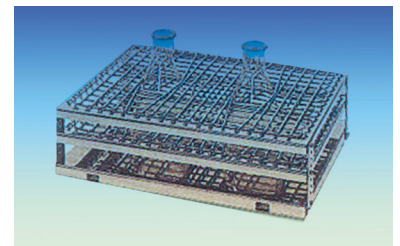
Main Screen



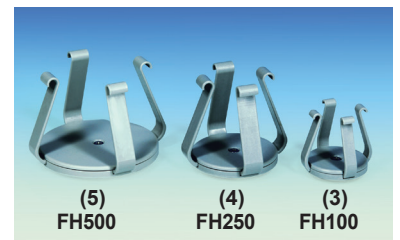
RS232C Cable & Software



(1) Universal Platform SP600 (Included)



(2) Universal Spring Rack SR500 (Optional)



(5) FH500 (4) FH250 (3) FH100

Flask Holders (Optional)

witeg® Precise Shaking Incubator, “WIS-10”, Top Door-type, Orbital Motion, with Certi. & Traceability with Universal Platform, Digital Fuzzy Control, with or without illuminators & Recorder, up to 60°C, 30~250 rpm



Precise Shaking Incubator, Top Door Type “WIS-10R” with Universal Platform

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Biological Cultures under various Temperature
- Patented Jog-Shuttle Control System
- CE Certified
- PL(Product Liability) Insurance

- * Precise Temperature Control by Digital Fuzzy Controller, up to 60°C
- * Digital LCD with Back-Light Function
- * Minimum Noise and No Vibration
- * Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
- * Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
- * Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)
- * RS232C Interface for Monitoring and Controlling with PC

Specification

Model	"WIS-10"	"WIS-10R"	"WIS-10RL"
Illumination System	None		FPL 55W x 4ea
Temp. Range	Ambient +5°C ~ 60°C	10°C ~ 60°C	
Temp. Accuracy & Uniformity	Accuracy : ±0.2°C at 37°C, Uniformity : ±0.5°C at 37°C		
Temp. Sensor	PT100 Sensor		
Heater	800 W	1 kW	1.2 kW
Compressor	None	1/3 HP	
Compressor Control	None	Intelligent Control of Refrigerator for preventing Overload of Compressor	
Refrigerant	CFC-Free (R134A) Refrigeration System		
Shaking Speed & Stroke	30 ~ 250 rpm, 25mm Orbital Motion		
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end		
Display	Digital LCD with Back-Light Function		
Controller	Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Room Lamp	Krypton Lamp, 60W		None
Platform	Included Universal Platform for Various Shapes & Sizes of Flasks		
Optional Flask Holder	Durable & Flexible Plastic Flask Holder (up to 1000ml)		
Available Max. Capacity of Flask Holder	for 50~100ml	Available 68 ea Flask Holder FH100 , for 50~100ml Flask	
	for 200~300ml	Available 36 ea Flask Holder FH250 , for 200~300ml Flask	
	for 500~1,000ml	Available 21 ea Flask Holder FH500 , for 500~1,000ml Flask	
Safety Circuit	Over Temp./ Current Protector, Leakage Breaker, Sensor Error Detector		
Material	Internal : Stainless Steel (#304), External : Powder Coated Steel		
Dimension	Internal : 750 x 720 x h400mm, External : 1,065 x 900 x h980mm		
Packing Size (w x d x h) (mm)	1,220 x 1,060 x h1,200mm		
& Gross Weight	231 kg	238 kg	238 kg
Power Consumption	800 W	1.8 kW	2.1 kW
Power plug type	Hybrid E+F		
Power Supply*	AC 230V, 1N~, 50/60Hz		

* Other Specifications are available upon Customer s Request.

Ordering Information

Ambient +5°C~60°C, With Universal Platform

DH.WIS01010 Shaking Incubator, Top Door-type, 230V, “WIS-10”

10°C~ 60°C, With Universal Platform

DH.WIS01011 Shaking Incubator, Top Door-type, 230V, “WIS-10R”

10°C~ 60°C, with Universal Platform & Illumination System

DH.WIS01012 Shaking Incubator, Top Door-type, 230V, “WIS-10RL”

<Continued on next page>

Cat. No	Description	Articles
---------	-------------	----------

<Continued from... Precise Shaking Incubator, "WIS-10">

Optional Platform/Spring Rack/Flask Holders

- DH.WIS504510 (1) Universal Spring Rack, w693 x d653 x h135mm, "SR510", for "WIS-10(R/RL)"
- DH.WIS504610 (2) Universal Platform, w688 x h648mm, "SP610", for "WIS-10(R/RL)"
- DH.WIS504030 (3) Flask Holder, for 50~100ml Flask, "FH100", for "SHO", "SHR" and "WIS"
- DH.WIS504035 (4) , for 200~300ml Flask, "FH250", for "SHO", "SHR" and "WIS"
- DH.WIS504040 (5) , for 500~1000ml Flask, "FH500", for "SHO", "SHR" and "WIS"
- DH.WTH05100 (6) Temperature Recorder, with 6ea Ribbon Cassette & Chart Paper
LED, 6ch/10sec, 144 x 144 x h233mm, "WTH5105"
- DH.WTH05108 Ribbon Cassette, 6 Colors, "WTH5108"
- DH.WTH05105 Chart Paper, w100mm x L10m, "WTH5105"

Validation (IQ, OQ) Service

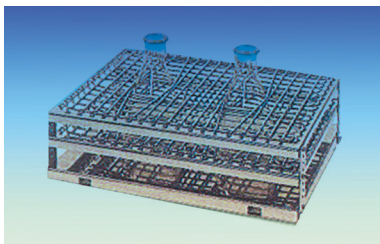
- DH.WIS31010 Validation Service(IQ, OQ), "ISV1010", for "WIS-10"
- DH.WIS31011 , "ISV1011", for "WIS-10R"
- DH.WIS31012 , "ISV1012", for "WIS-10RL"



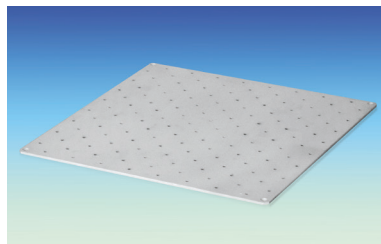
2-Year Warranty



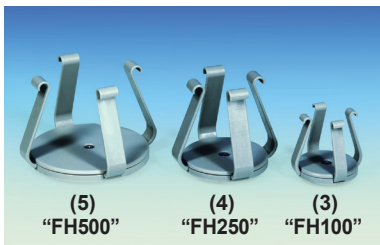
Precise Shaking Incubator, Top Door Type "WIS-10R" with Universal Platform



(1) Universal Spring Rack "SR510" (Optional)



(2) Universal Platform "SP610" (Included)



Flask Holders (Optional)



(6) Temperature Recorder : with 6ea Ribbon Cassette and Chart Paper

WiseRemote® Remote Control Software

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



Main Screen



RS232C Cable & Software

witeg® Multi-Stack Refrigerated Shaking Incubator, “WIS-ML”, Orbital Motion, with Certi. & Traceability with Universal Platform, Digital Fuzzy Control, 2 or 4 Independent Shaking Speed Control, 10~60°C, 30~250 rpm, 2-/4- Stacks



WisD

2-Year Warranty

Multi-Stack Refrigerated Shaking Incubator “WIS-ML04” with 4 X Universal Platform

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Excellent for Multi-use and wide range of Sample Testing under various Temperature
- **Patented Jog-Shuttle Control System**
- **CE Certified** ■ **PL(Product Liability) Insurance**

- * Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- * Intelligent Control of Refrigerator for Preventing Overload of Compressor
- * High-Quality LCD with Back-Light Function Used
- * 10 ~ 60°C Range, Accuracy of ±0.1°C
- * Advanced Shaking Mechanism provides Quiet Shaking and Precise Speed Control
- * Space Saving Design for Large Quantity Samples with 2 or 4 Independent Shaking Speed Controller
- * Automatic Stop of Shaking, Heating and Refrigeration when the Door is Opened
- * RS232C Interface for Monitoring and Controlling with PC
- * Over Temperature & Over Current Protection and Sensor Error Detection
- * Including Universal Platform for Various Shapes and Sizes of Flasks
- * Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

Specification

Stack & Model	2 Stacks “WIS-ML02”	4 Stacks “WIS-ML04”
Temp. Range & Accuracy	10°C~ 60°C, ±0.2°C at 37°C	
Temp. Uniformity & Sensor	±1.0°C at 37, PT100 Sensor	
Heater	1.5 kW	1.8 kW
Compressor	1/2 HP	3/4 HP
Compressor Control	Intelligent Control of Refrigerator for Preventing Overload of Compressor	
Refrigerant	CFC-Free(134A) Refrigeration System	
Shaking Speed & Stroke	30 ~ 250 rpm, 25mm Orbital Motion	
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end	
Display	Digital LCD with Back-Light Function	
Controller	Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Door	Magnetic Packing Door with Pair Glass	
Plate Size	w700 x d600mm	
Platform	Included Universal Platform for Various Shapes & Sizes of Flasks	
Optional Flask Holder	Durable & Flexible Plastic Flask Holder (up to 1000ml)	
Available Max. Capacity of Flask Holder	for 50~100ml	Available 68 ea Flask Holder “FH100”, for 50~100ml Flask
	for 200~300ml	Available 36 ea Flask Holder “FH250”, for 200~300ml Flask
	for 500~1000ml	Available 21 ea Flask Holder “FH500”, for 500~1,000ml Flask
Safety Circuit	Over Temp./ Current Protector, Sensor Error Detector	
Material	Internal : Stainless Steel (#304), External : Powder Coated Steel	
Dimension (w x d x h)	Internal (mm)	700 x 700 x 1,100
	External (mm)	1,290 x 850 x 1,445
Packing Size (w x d x h) (mm) & Gross Weight		1,500 x 1,200 x 1,750
		397 kg
Power Consumption	2.4 kW	3.2 kW
Power plug type	Hybrid E+F	5 pole 16A CEE
Power Supply*	AC 230V, 1N~, 50/60Hz	AC 400V, 3N~, 50/60Hz

* Other Specifications are available upon Customer s Request.

Ordering Information

2-Stackers Refrigerated Shaking Incubator, with 2 x Universal Platform

DH.WIS05002 Multi-Stack Shaking Incubator, 230V, “WIS-ML02”

4-Stackers Refrigerated Shaking Incubator, with 4 x Universal Platform

DH.WIS03004 Multi-Stack Shaking Incubator, 3Phase, “WIS-ML04”

<Continued on next page>

<Continued from... Multi-Stack Refrigerated Shaking Incubator, "WIS-ML">

Optional Platform/Spring Rack/Flask Holders

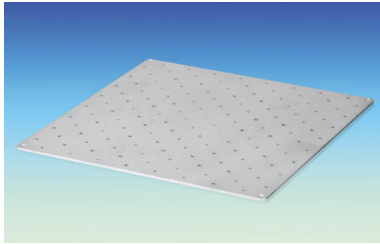
- DH.WIS504620 (1) Universal Platform, w645 x h645mm, "SP620", for "WIS-ML02/04"
- DH.WIS504520 (2) Universal Spring Rack, w653 x d653 x h135mm, "SR520", for "WIS-ML02/04"
- DH.WIS504030 (3) Flask Holder, for 50~100ml Flask, "FH100", for "SHO", "SHR" and "WIS"
- DH.WIS504035 (4) , for 200~300ml Flask, "FH250", for "SHO", "SHR" and "WIS"
- DH.WIS504040 (5) , for 500~1000ml Flask, "FH500", for "SHO", "SHR" and "WIS"

Validation (IQ, OQ) Service

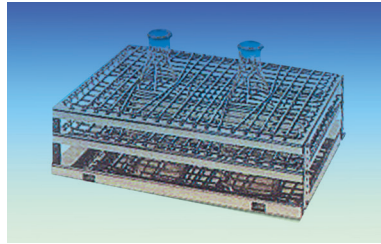
- DH.WIS35002 Validation Service(IQ, OQ), "ISV5002", for WIS-ML02"
- DH.WIS35004 , "ISV5004", for WIS-ML04"



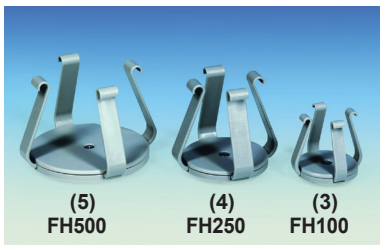
Multi-Stack Refrigerated Shaking Incubator "WIS-ML04" with 4 x Universal Platform



(1) Universal Platform SP620 (Included)



(2) Universal Spring Rack SR520 (Optional)



(5) FH500 (4) FH250 (3) FH100

Flask Holders (Optional)

WiseRemote® Remote Control Software

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



Main Screen



RS232C Cable & Software

witeg® Programmable Ball Mill, “BML”, 2-/6- Pots, with Certi. & Traceability
with Digital Feedback Control System, Digital LCD, 50~600 rpm, ±5 rpm, 10 Steps 6 Programs



2-Places Programmable Ball Mill “BML-2”



6-Places Programmable Ball Mill “BML-6”



Optional Soundproof Cabinet “BMC-6”
for 6-Places Programmable Ball Mill “BML-6”

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Grinding/Mixing : Crystalline Chemicals, Inks, Paints, Pigments, Plants, Racks and Soils
- Microprocessor, Programmable, Variable Speed : 50~600 rpm
- Digital Feedback Control and LCD : Speed (RPM), Power Bar-Graph and Timer Status
- CE Certified ■ PL(Product Liability) Insurance

- * Antistatic Rubber Roller : Keeps Jars / Pots Centered
- * Digital LCD with Back-Light Function
- * Over Load Protection
- * Ergonomic and Compact Design
- * NBR Roller with Pot Guide Ring
- * Programmable Operation : 10 Steps 6 Programs
- * Storage Function (RPM, Timer)
- * Soundproof Cabinet for Safety and Minimum Noise (Optional)

Specification

Model	2-places “BML-2”	6-places “BML-6”
Capacity	up to 2 pots	up to 6 pots
Motor	DC 40W Geared Motor (5 : 1 ratio)	DC 100W Geared Motor (5 : 1 ratio)
Maximum Load	40kg	120kg
Speed Range	50 ~ 600 rpm	
Speed Accuracy	±5 rpm	
Timer	99 hr 59 min (Programmable)	
Display	Digital LCD with Back-Light Function	
Controller	Programmable Digital Feedback Controller with Jog-Shuttle Switch (Turn+Push)	
Program Function	10 Steps, 6 Programs	
Safety Device	Over Load Protector for Motor	
Dimension (w x d x h)	Roller (mm)	50 x 300
	External (mm)	620 x 300 x 515
Packing Size (w x d x h) (mm)	760 x 460 x 700	1,300 x 620 x 1,010
& Gross Weight	52 kg	115 kg
Power Consumption	40 W	100 W
Power plug type	Hybrid E+F	
Power Supply*	AC 230V, 1N~, 50/60Hz	

* Other Specifications are available upon Customer s Request.

Ordering Information

For 2 Pots

DH.WBM05002 Ball Mill, 2-places “BML-2”, 230V, with Cord/Plug

For 6 Pots

DH.WBM05006 Ball Mill, 6-places “BML-6”, 230V, with Cord/Plug

Optional Soundproof Cabinets

- * Designed for Minimizing Noise, and Safety Work

DH.WBM505102 Soundproof Cabinet, “BMC2”, for 2-places “BML-2”, w1,020 x d570 x h1,120mm

DH.WBM505106 Soundproof Cabinet, “BMC6”, for 6-places “BML-6”, w1,600 x d770 x h1,400mm