

**DAIHAN-brand® 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**



**Multi-Stack Refrigerated Shaking Incubator “WIS-ML04” with 4× 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 × 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 × d × h)	Internal (mm)	700 × 700 × 1,100
	External (mm)	1,290 × 850 × 1,445
Packing Size (w × d × h) (mm) & Gross Weight		1,500 × 1,200 × 1,750
		397 kg
Power Consumption	2.4 kW	3.2 kW
Power Supply*	1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase 380V, 50/60Hz

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

**Ordering Information**

**2-Stackers Refrigerated Shaking Incubator, with 2 × Universal Platform**

DH.WIS05002 Multi-Stack Shaking Incubator, 1Phase, 230V, “WIS-ML02”  
DH.WIS05102 , 120V, “WIS-ML02”

**4-Stackers Refrigerated Shaking Incubator, with 4 × Universal Platform**

DH.WIS05004 Multi-Stack Shaking Incubator, 1Phase, 230V, “WIS-ML04”  
DH.WIS05104 , 120V, “WIS-ML04”  
DH.WIS03004 , 3Phase, 380V, “WIS-ML04”

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**Optional Platform/Spring Rack/Flask Holders**

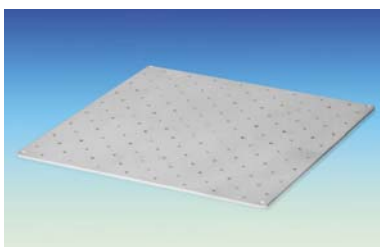
- DH.WIS504620 (1) Universal Platform, w645×h645mm, "SP620", for "WIS-ML02/04"
- DH.WIS504520 (2) Universal Spring Rack, w653×d653×h135mm, "SR520", for "WIS-ML02/04"
- DH.WIS504030 (3) Flask Holder, for 50~100ml Flask, "FH100", for "SHO", "SHR" and "WIS"
- DH.WIS504035 (4) Flask Holder, for 200~300ml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

**Validation (IQ, OQ) Service**

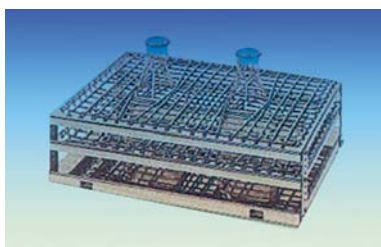
- DH.WIS35002 Validation Service(IQ, OQ), "ISV5002", for "WIS-ML02"
- DH.WIS35004 Validation Service(IQ, OQ), "ISV5004", for "WIS-ML04"



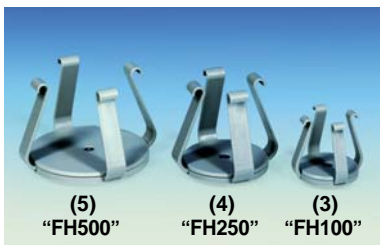
Multi-Stack Refrigerated Shaking Incubator "WIS-ML04" with 4× Universal Platform



(1) Universal Platform "SP620" (Included)



(2) Universal Spring Rack "SR520" (Optional)



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