

**DAIHAN® Precise Shaking Incubator "ThermoStable™ IS-20"**, BenchTop-type, up to 60℃ & 1000mL  
 With Universal Platform, Fuzzy Control, RS232C Interface for PC, Orbital Motion, 30~250 rpm, 101 Lit  
 진탕 배양기/인큐베이터, 벤치 탑 타입, 고정밀 디지털 퍼지 제어, Universal Platform 포함

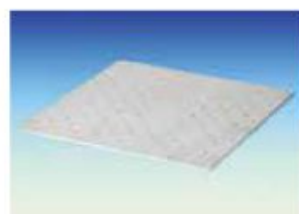


A. "IS-20" R/T  $\pm 5^\circ\text{C}$  ~ 60℃  
 B. "IS-20R" 10℃ ~ 60℃ Refrigerated



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

**WiseRemote Control Software :**  
 Download from [DAIHAN-Sci.com](http://DAIHAN-Sci.com)



(1) Universal Platform "SP600" (Included)



(2) Universal Spring Rack Platform "SR500" (Optional)



STS Flask Holder w/Spring Ring (Optional)

DH.WIS504600  
 DH.WIS504500  
 DH.WIS600100  
 DH.WIS600250  
 DH.WIS600500  
 DH.WIS601000

- (1) Spare Universal Platform, 478×478mm, "SP600", for "IS-20(R)", Included
- (2) Spare Universal Spring Rack, 483×483×h135mm, "SR500", for "IS-20(R)"
- (3) STS Wire Spring Flask Holder, for 100mL Flask, "FHS100", for "SHO", "SHR" and "IS"
- (4) , for 250mL Flask, "FHS250", for "SHO", "SHR" and "IS"
- (5) , for 500mL Flask, "FHS500", for "SHO", "SHR" and "IS"
- (6) , for 1000mL Flask, "FHS1000", for "SHO", "SHR" and "IS"

- CE Certified    ■ PL (Product Liability) Insurance
- 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    ■ Stabilized Orbital Motion

- \* Precise Temperature Control by Digital Fuzzy Controller, up to 60℃, PT100 Sensor
- \* 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    \* Minimum Noise and No Vibration
- \* RS232C Interface for Monitoring and Controlling with PC
- \* Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

## Specifications & Ordering information

Spec.	Model	A. "ThermoStable™ IS-20"	B. "ThermoStable™ IS-20R" with Refrigerator
Temp. Range		Room Temp. +5℃ ~ 60℃	10℃ ~ 60℃
Temp. Accuracy & Uniformity		Accuracy : $\pm 0.2^\circ\text{C}$ at 37℃, Uniformity : $\pm 0.5^\circ\text{C}$ at 37℃	
Capacity		101Lit	
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(404A) 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) & Capacity for Optional Flask Holders		Universal Platform for Various Shapes & Sizes of Flasks Capacity : 32 ea Flask Holders for 50~100mL Flask 20 ea Flask Holders for 200~300mL Flask 16 ea Flask Holders 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 : 530×530×h350mm, External : 575×855×h850mm	
Packing Size (w×d×h) (mm)		1,000×800×h1,100mm	
& Gross Weight		147 kg	150 kg
Power Consumption		500 W	1.2 kW
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	

Cat. No.	60Hz	230V	DH.WIS00220	DH.WIS01220
		120V	DH.WIS00120	DH.WIS01120
	50Hz	230V	DH.WIS00520	DH.WIS01520
		120V	DH.WIS00420	DH.WIS01420

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

## C. Validation (IQ, OQ) Service Shaking Incubator

DH.WIS32010 Validation Service(IQ, OQ), with "IS-20", 60Hz, "ISV2010"  
 DH.WIS32011 , with "IS-20R", 60Hz, "ISV2011"

## Optional Spring Rack Platform and Stainless-steel Flask Holder(w/Spring Ring)