# Incubator Oven

# Controller SMART-Lab™ Jog-Dial

# Anytime - Anywhere connected laboratory



## **SMART-Lab™ Controller**



- full touch screen TFT LCD:
- WiRe™ app service, remote control system
- variable program settings
- self-diagnosis and interactive temperature graph
- automatic data recording and password protection
- · data transfer to PC by USB memory
- digital calibration (offset function)
- min-/max-temperature memory & program function
- push-alarm service to smartphone or tablet PC

more information on 8 - 11

## **SMART-Lab devices**

## **Incubator**

SWIG 70°C, 32 / 50 / 105 / 155 I - page 59

SWIF 70°C, 50/105/155 I - page 61

SWIR 0-60°C, refrigerated - page 65

STH -20/-40°C, 98% rel. hum. - page 72

STH-E -20°C, 95% rel. hum. - page 73

SWGC Illumination, 95% rel. hum. - page 74

## Oven

**SWON** 230°C, 32/50/105/155 I - page **77** 

**SWOF** 250°C, 50/105/155 I - page **79** 

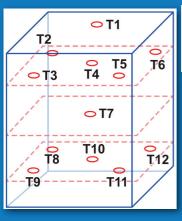
SWOV 200°C, 18.6/30/70 I, 750mmHg - page 81

## **Jog-Dial controller**

- ergonomic design for easy and convenient usage
- 2-way Jog-Dial knob provides simple setting of required temperature and time
- · high quality illuminated LCD
- "MAIN" and "SUB" button to access all menus

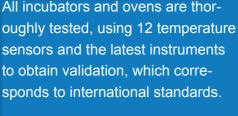


# Incubator Oven WIG 70°C, 32 / 50 / 105 / 155 I on page 58 WON 230°C, 32/50/105/155 I on page 76 WIF 70°C, 50/105/155 I on page 60 WOF 250°C, 50/105/155 I on page 78 WIR 0-60°C, refrigerated on page 64 WOV 200°C, 18.6/30/70 I, 750mmHg on page 80



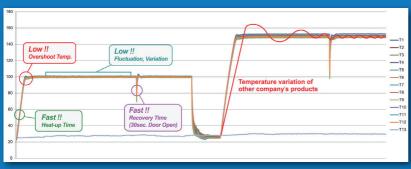
## Temperature uniformity successfully tested by **ASTM** standards

All incubators and ovens are thor-



## Incubator Oven

General information



## **Green product**

All incubators and ovens achieve minimum power consumption by using heating elements consuming minimum power adjusted for the capacity and temperature of the chamber.

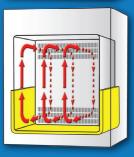




## Incubator air-flow

## **Gravity-air**

The incubators gravity-air flow is established by creating radiant and conductive heat on three sides of the chamber (bottom, left and right side).



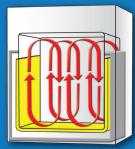
## Forced-air

The incubators forced-air flow is established by a three sided heating element in combination with a very effective fan placed in an air-flow room for best temperature uniformity in the whole chamber.

## Oven air-flow

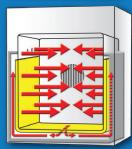
## **Gravity-air**

The ovens gravity-air flow is established by heating up air in a pre-heating zone by heating elements on the bottom, left and right side. The pre-heated air will be restrictively provided into the chamber.



## Forced-air

The ovens forced-air flow is established by a very effective fan installed in the rear of the chamber sucking air from the chamber into the pre-heating zone where heating elements on the bottom, left and right side heat up air. The pre-heated air is uniformly and quickly provided into the chamber by a special side and bottom structure.





## Incubator | growth chamber

Smart-Lab™ controller, -20°C up to +80°C, up to 95° relative humidity

95% RH -20°C 100°C





## STH-E -20°C, 95% rel. hum.

### Ideal for:

 growth of organisms, stability and endurance testing of materials

## Features:

- · economical and practical type
- CFC free refrigerant (R-404A) and automatic defrost system
- · powerful and silent dual fan motor
- inner tempered glass door with silicone packing offers easy observation without door opening
- stainless steel interior and powder-coated steel body
- 3x perforated stainless steel shelves included
- CE certified and unique serial number for tracing

## Safety mechanism:

- push alarm service to your smartphone
- overheat and over-current protection
- sensor error detection and leakage breaker
- low water level alarm lamp
- high-low temperature protection
- door ajar and power failure alarm

### Controller:

- Smart-Lab™ controller with 7" full touch screen TFT LCD:
  - ♦ WiRe™ app service, remote control system
  - variable program settings
  - ♦ self-diagnosis and interactive temperature graph
  - ◆ automatic data recording and password protection
- ♦ data transfer to PC by USB memory
- digital calibration (offset function)
- min-/max-temperature memory & program function

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			3		
	55 with 3x	perforate	ed.		
STH-E1	55 with 3x forms (included)	perforate uded)	od .		

Model	STH-E155	STH-E305	STH-E420	STH-E800		
Capacity	155 l	305 I	420 I	800 I		
Temperature range & accuracy	-20°C - +80°C, ±0.3°C (stability ±1.0°C)					
Humidity range & accuracy	30% - 95% RH, ±2% (stability ±3% RH)					
Compressor	7/8 HP	1.5 HP	1.5 HP	3 HP		
Heater for temperature	1.5 kW	2.0 kW	2.2 kW	2.5 kW		
Heater for humidity	2.0 kW	3.0 kW	3.0 kW	3.0 kW		
Sensor	PT100 & capacitive sensor					
Internal dimensions (W x D x H)	505 x 505 x 610 mm	620 x 620 x 800 mm	750 x 660 x 860 mm	1000 x 800 x 1000 mm		
External dimensions (W x D x H), net weight	745 x 920 x 1645 mm 290 kg	820 x 1290 x 1720 mm 309 kg	990 x 1075 x 1885 mm 378 kg	1200 x 1100 x 1920 mm 558 kg		
Packing size & gross weight	990x1120x1850 mm 355 kg	1220x1220x2050 mm 369 kg	1800x1800x2160 mm 478 kg	1490x1320x2200 mm 678 kg		
Power supply	1 Phase AC 120V, 60 Hz or AC 230V, 50/60 Hz or 3 Phase					
Power consumption	4,4 kW	5,7 kW	6,3 kW	8,2 kW		
Order number 230V*	DH.STHE0155	DH.STHE0305	DH.STHE0420	DH.STHE0800		
Order number 120V*	DH.STHE4155	DH.STHE4305	DH.STHE4420	DH.STHE4800		
Order number 3 Phase	DH.STHE5155	DH.STHE5305	DH.STHE5420	DH.STHE5800		

<sup>\* 230</sup>V and 120V models not available in Europe

Accessories: Suitable platforms and temperature recorder can be found on page 75