

## **Incubating Cooling Thermal Shakers**



# Industry Leading Thermal Shaker with Exceptional Heating/Cooling Performance with High Speed Shaking

OHAUS Thermal Shakers are designed for heating and cooling applications that require consistent and precise high-speed shaking with dependable temperature control from 17°C below ambient to 100°C. Temperature can be user-calibrated when precision is required. Customize applications with interchangeable blocks to accommodate tubes & microplates. Intuitive touchscreen allows the user to view all steps of the program while monitoring the progress.

#### **Standard Features:**

- Best in class temperature performance. Enhanced electronics and software allow for fast and accurate temperature control you can trust. Cooling models reach temperatures down to 17°C below ambient.
- Intuitive touchscreen for simple operation and programming. Set the functions and the comprehensive help screens in one of six languages to guide the user through the operation of the unit.
- Easily create programs for repeat applications. Storage for five separate, 5-step programs. The USB port allows the transfer of test data to a flash drive for data logging and program storage.

# **Incubating Cooling Thermal Shakers**

Model	ISTHBLHTS	ISTHBLCTS
Shaker Type	Thermal Shaker	Cooling Thermal Shaker
Control	Touchscreen	
Motion	Orbital, 0.1 in. / 3 mm	
Speed Range	300 – 3000 rpm	
Speed Accuracy	± 2%	
Temperature Range	Ambient + 4 °C – 100 °C	17 °C below Ambient – 100 °C
Temperature Accuracy	+/- 1 °C between 20 °C and 45 °C; +/- 2 °C above 45 °C	+/- 0.5 °C between 20 °C and 45 °C; +/- 2 °C below 20 °C and above 45 °C
Heating Rate	5 °C/min	
Cooling Rate	Above ambient 2-3 °C/min, Below ambient 0.5-10 °C/min	
Timer	1 second – 99 hours, 59 minutes	
Capacity	1 Thermal block	
Working Environment	41 °F – 95 °F, 80% RH*, non-condensing / 5 °C – 35 °C, 80% RH, non-condensing	
Display	4.3 in. / 10.9 cm color touchscreen LCD	
Drive System	Brushless DC Motor	
Overall Dimensions (L $\times$ W $\times$ H)	10.6 × 10.03 × 5.4 in. / 269 × 262 × 137 mm	
Net Weight	10.8 lb / 4.9 kg	
Power	120V, 1.8A, 50/60Hz	
Power Consumption	215 W	

<sup>\*</sup>Relative Humidity

#### Other Standard Features and Equipment

Unit supplied with block for  $24 \times 1.5$  mL tubes, removable rack and cover. Detachable 3-wire cord and plug (included). Additional features: hot top indicator, audible alarm, maximum temperature limiting function, temperature priority function, pulse/quick mix mode, temperature calibration mode, temperature ramp rate function

### **Compliance**

- Product Safety: CAN/CSA C22.2 61010-1, CAN/CSA C22.2 61010-2-010, CAN/CSA C22.2 61010-2-051, UL 61010-1
- Electromagnetic Compatibility: ICES-003 Class A, FCC Part 15 Class A
- Compliance Marks: TÜV SÜD

### **Applications**

DNA, RNA, cell cultures, hybridizations, protein studies

#### **Accessories**

Item No.	Description	
30400126	Microplate Thermal Block	
30400127	384 Well PCR Plate Thermal Block	
30400128	0.2 mL PCR Plate/Tube Thermal Block	
30400129	Block For $30 \times 0.5$ mL Tubes	
30400130	Block For 24 × 1.5 mL Tubes	
30400131	Block For 24 × 2.0 mL Tubes	
30400132	Block For 24 × 5-7 mL Tubes (12 mm)	
30400133	Block For 24 × 2.0 mL Cryotubes	
30400134	Block For 9 × 5 mL Eppendorf Tubes	
30400135	Block For 8 × 15 mL Conical Tubes	
30400136	Block For 4 × 50 mL Conical Tubes	
30400250	Rack For $30 \times 0.5$ mL Tube Block	
30400251	Rack For 24 $\times$ 1.5 / 24 $\times$ 2.0 mL Tube Blocks	
30400252	Cover For 0.5 mL / 1.5 mL / 2.0 mL Tube Blocks	

#### **Dimensions**





