



THERMO SHAKER INCUBATOR

THERMO SHAKER INCUBATOR LTSI-100 SERIES

Labocon Thermo Shaker Incubator LTSI-100 Series integrates mixing and shaking with intelligent operation. It not only can mix various micro volume tube, PCR plate, deep hole plate and micro plate and other common laboratory supplies, but also vortex all kinds of tubes. The unique design principle which combines mixing and shaking with intelligent control makes its operation simpler, safer, and more convenient.

Features

- **For Model LTSI-101:**
 - Optimized 2D mixing with anti-spill technology
 - Designed for simultaneous mixing and vortexing operation
 - Mixing in a 3-in-1 format: Plates (up to 96-well and 384-well formats), Micro-Tubes, Vortexing numerous tube formats
 - Pre-programmed soft keys and reliable universal holder
 - Automatic imbalance detection
 - Anti-spill technology
- **For Model LTSI-102, LTSI-103:**
 - Mixing and heating modes can be used both simultaneously and independently
 - Optimized 2D mixing control
 - Accurately controls and displays time, temperature and speed
 - Calibration of temperature to meet user requirement
 - Brushless DC Motor ensures low maintenance, high efficiency, constant speed of rotation
 - Low noise and stable working even at fastest speed
 - Over-heating protection device
 - Custom blocks available to meet experimental requirement
 - Can be used for micro test tubes, PCR plates, deep-well plates

- **For Model LTSI-104, LTSI-105:**
 - Accommodate two (LTSI-104) and four (LTSI-105) micro-plates
 - Two-sided heating of micro plates allows achieving the set and actual temperature in wells of the micro plates
 - Good linearity and accurate temperature oscillation speed
 - Microprocessor PID temperature controller controls time and temperature with good linearity and small fluctuation
 - Simultaneous display of set and actual temperature, shaking speed and time
 - Brushless DC Motor ensures low maintenance, high efficiency, constant speed of rotation
 - User friendly touch operation interface
 - Audio alarm signals program completion
 - Data can be stored and recovered on power or system failure

Application

Labocon Thermo Shaker Incubator is suitable for incubation and cultivation of biological and chemical components, re-suspending pellets, denaturing of nucleic acids and proteins, PCR preparations, ELISA assays, colorimetric assays, enzyme and protein analysis etc. in microbiology, cell and molecular biology, immunology and biotechnology.



LTSI 101



LTSI 105

Specification

Model	LTSI-101	LTSI-102	LTSI-103	LTSI-104	LTSI-105
Temp. Range	No heating function	RT +5-100℃	0-100℃	RT+5-70℃	
Temp. Accuracy		<± 0.3℃		≤±0.2℃	
Temp Resolution		0.1℃			
Time for Heating		≤20min (from 20℃ to 100℃)		<25 min (from 20℃ to 70℃)	
Time for Cooling	No cooling function		≤25min(RT-20℃) ≤15min(from 100℃ to 20℃)	No cooling function	
Shaking Motion	Orbital				
Shaking Speed	300-3000 rpm	300-2000 rpm	300-1600 rpm	300-1200 rpm	
Vortex Shaking Speed	3500 rpm	None			
Shaking Orbit	3mm				2mm
Time Range	1s-99h59min	1min-99h59min		0-99h59min	
Display	LCD			LED	
Overall Dimension	270x196x170 mm	270x190x170 mm		284x264x157 mm	345x310x178 mm
Power	45 W	200 W		150 W	250 W
Power Supply	230 V, 60 Hz				
Weight	4.5 kg	6.8 kg	8.3 kg	11 kg	12 kg
Catalog No.	9173113344	9173114344	9173115344	9173116344	9173117344

Accessories for LTSI-101

Model	Description
LTS-01	96 x 0.2ml Falcon Tube Standard
LTS-02	24 x 0.5ml Falcon Tube Standard
LTS-03	24 x 1.5/2.0ml Falcon Tube Standard

Accessories for LTSI-102, LTSI-103

Model	Description
LB-01	96 x 0.2ml
LB-02	54 x 0.5ml
LB-03	35 x 1.5ml
LB-04	35 x 2.0ml
LB-05	15 x 0.5ml + 20 x 1.5ml
LB-06	24 x diameter $\leq \varnothing 12$ mm tubes
LB-07	32 x 0.2ml + 25 x 1.5ml
LB-08	32 x 0.2ml + 10 x 0.5ml + 15 x 1.5ml
LB-09	103 x 67 x 30 (Bath Block)
LM-01	96 x 0.2ml Micro-plate
LTS-04	96 x 0.2ml Falcon Tube Standard
LTS-05	24 x 0.5ml Falcon Tube Standard
LTS-06	24 x 1.5/2.0ml Falcon Tube Standard

THERMO SHAKER INCUBATOR LTSI-200 SERIES

Labocon Thermo Shaker Incubator LTSI-200 Series integrates mixing and shaking with intelligent operation. It not only can mix various micro volume tube, PCR plate, deep hole plate and micro plate and other common laboratory supplies, but also vortex all kinds of tubes. The unique design principle which combines mixing and shaking with intelligent control makes its operation simpler, safer, and more convenient.

Features

- **For Model LTSI-201:**
 - Optimized 2D mixing with anti-spill technology
 - Designed for simultaneous mixing and vortexing operation
 - Mixing in a 3-in-1 format: Plates (up to 96-well and 384-well formats), Micro-Tubes, Vortexing numerous tube formats
 - Universal holder accommodates a variety of tubes and plates
 - Pre-programmed soft keys
 - Automatic imbalance detection
- **For Model LTSI-202, LTSI-203**
 - Mixing and heating modes can be used both simultaneously and independently
 - Brushless DC Motor ensures low maintenance, high efficiency, constant speed of rotation
 - Accurately controls and displays time, temperature and speed
 - Low noise and stable working even at fastest speed
 - Over-heating protection device
 - Custom blocks available to meet experimental requirements
 - Audible signal indicates program completion
- **Model LTSI-203:** Peltier design thermal control in a compact unit

- **For Model LTSI-204, LTSI-205:**
- Small, light, highly efficient and quiet operation
- Thermoshaker that blends various microplates, tubes and glass vials
- Fast and precise shaking and mixing (LTSI-204)
- Optimized 3D mixing prevents spilling and lid wetting
- Efficient and rapid orbital movement eliminates the need for centrifugation
- Accurate processing and anti-vibration technology
- Two programmable soft keys, integrated vortex and short mix functions

Application

Labocon Thermo Shaker Incubator is suitable for incubation and cultivation of biological and chemical components, re-suspending pellets, denaturing of nucleic acids and proteins, PCR preparations, ELISA assays, colorimetric assays, enzyme and protein analysis etc. in microbiology, cell and molecular biology, immunology and biotechnology.



LTSI 201



LTSI 202

Specification

Model	LTSI-201	LTSI-202	LTSI-203	LTSI-204	LTSI-205
Temp. Range	No heating function	+5-100°C	0-100°C	RT+5-100°C	
Temp. Accuracy		≤± 0.5°C		±0.25°C at 37°C ±0.5°C at 95°C	
Temp Resolution		0.1°C			
Time for Heating		≤15min (from 20°C to 100°C)		≤12min	
Time for Cooling	No cooling function		≤30min (from ambient - 20°C) ≤15min(from 100°C to 20°C)	No cooling function	
Shaking Motion	Orbital				
Shaking Speed	300-3000rpm	200-1500 rpm		300-3000 rpm	300-1700 rpm
Shaking Orbit	3mm			2 mm	3 mm
Vortex Speed	3500rpm	None			
Timer Range	15s-99h59min	1min-99h59min		1min-100h	
Overall Dimension	170x240x140mm	300x220x170mm		230x170x130 mm	
Power	45 W	150 W			
Power Supply	230 V, 60 Hz				
Weight	4.5 kg	7 kg	8.5 kg	6 kg	
Catalog No.	9173118105	9173119105	9173120105	9173121105	9173122105

Accessories for LTSI-201

Model	Description
LTH-01	0.2ml PCR Tube Holder
LTH-02	0.5ml Tube Holder
LTH-03	1.5/2.0ml Tube Holder
LTH-04	15ml Tube Holder
LTH-05	50ml Tube Holder

Accessories for LTSI-202, LTSI-203

Model	Description
LB-10	96 x 0.2ml
LB-11	54 x 0.5ml
LB-12	35 x 1.5ml
LB-13	35 x 2.0ml
LB-14	15 x 0.5ml + 20 x 1.5ml
LB-15	24 x diameter $\leq \varnothing 12$ mm tubes
LB-16	103 x 67 x 30 (Bath Block)
LM-02	96 wells Micro-plate
LM-03	96 Deep well Micro-plate
LT-01	12 x 15ml Falcon Tube
LT-02	6 x 50ml Falcon Tube
LT-03	24 x 5ml Tube

Accessories for LTSI-204, LTSI-205

Model	Description
LB-17	96 x 0.2ml
LB-18	54 x 0.5ml
LB-19	35 x 1.5ml
LB-20	35 x 2.0ml
LB-21	15 x 1.5ml+20 x 0.5ml
LB-22	24 x Dia.≤φ12mm tubes
LB-23	32 x 0.2ml+25 x 1.5ml
LB-24	32 x 0.2ml+10 x 0.5ml+15 x 1.5ml
LB-25	103 x 67 x 30mm Bath Block
LM-04	96 wells Micro-plate
LTH-01	0.2ml PCR Tube Holder
LTH-02	0.5ml Tube Holder
LTH-03	1.5/2.0ml Tube Holder
LTH-04	15ml Tube Holder
LTH-05	50ml Tube Holder



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