





# Section 2 **Overview**

# 2.1 Specifications

#### Speed

Speed Range	5~80rpm
Display Accuracy	1 rpm
Speed Accuracy	±1rpm
Display	LED

Note: Maximum speed may vary with heavy or unbalanced loads.

#### Angle

Angle Adjustment Range	95°~180°
Step Angle	17°
Adjustment Method	Manual Adjustment

#### Load

Maximum Capacity	64×Φ18.5mm culture tubes (drum rotor)
Maximum Load (Centered on tray)	5 kg (Clamps Included)

### Time

Range	0, 1 min. ~ 99h59min.
Display	LED

# Size

Overall Dimensions	415×293×464mm(16.3×11.5×18.3in)
Standard Match Dimensions	15×50ml rotary plate (Diameter Φ290mm/11.4 in)
Package Dimensions	536×502×505mm(21.1×19.8×19.9in)

Section 2 Overview Section 2 Overview

#### Weight

Net Weight	9.4Kg(20.7lb)
Gross Weight	13.2Kg(29.0lbs)

#### Power Supply

Power Supply	AC100~240V, 50Hz/60Hz, 0.2A
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#### Others

Certificate	ROHS, WEEE, cCSAus, CE Mark
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## 2.2 Environmental Conditions

Application Environmental Conditions: indoor use

Temperature	5 to 40 °C (41 to 104 °F)
Humidity	20% to 85%,
Altitude	≤2,000 m
Voltage Fluctuation	$\pm$ 10% of the nominal voltage

#### Storage Environmental Conditions

Temperature	0 to 60 °C (36 to 124 °F)
Humidity	20% to 90%, non-condensing

### 2.3 Safety Instructions

Please read the entire instruction manual before operating the Multi-Purpose Tube Rotator.



**WARNING DO NOT** use the Multi-Purpose Tube Rotator in a hazardous atmosphere or with hazardous materials for which the unit was not designed. Also, the user should be aware that the protection provided by the equipment may be impaired if accessories used are not provided or recommended by the manufacturer, or are used in a manner not specified by the manufacturer.

**CAUTION !** To avoid electrical shock, completely cut off power to the unit by disconnecting the power cord from the unit or unplug from the wall outlet.

Disconnect unit from the power supply prior to maintenance and service. Any spills should be removed promptly. Biohazard spills should be cleaned using approved liquid promptly. Solvent spills are a fire hazard. Stop the unit immediately, and DO NOT operate until clean up is complete and vapors have dissipated.

**DO NOT** immerse the unit for cleaning.

**DO NOT** operate the unit if it shows signs of electrical or mechanical damage.

**Note:** The rotary plate maybe have a little vibration below 11 rpm, but the vibration will relieve or disapear when add some loads.

Various independent clamps are available with this Multi-Purpose Tube Rotator for convenient combination use. It is applicable for 1.5 to 50 ml microtubes to mix liquid efficiently and gently. It has an angle range of 95 to 180 degrees and can maintain suspension state of biological samples such as blood mixing. Applications include blood coagulation prevention, emulsion diagnosis, immunoprecipitation, and other related areas.