



# High Throughput Tissue Grinder

## U-GT48



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<https://ultrassay.com>



## Product Introduction

The Ultrassay U-GT48 is a high-quality benchtop high-throughput tissue homogenizer. It is equipped with 48 adapters for 2 mL or other-sized cell disruption tubes and grinding jars.

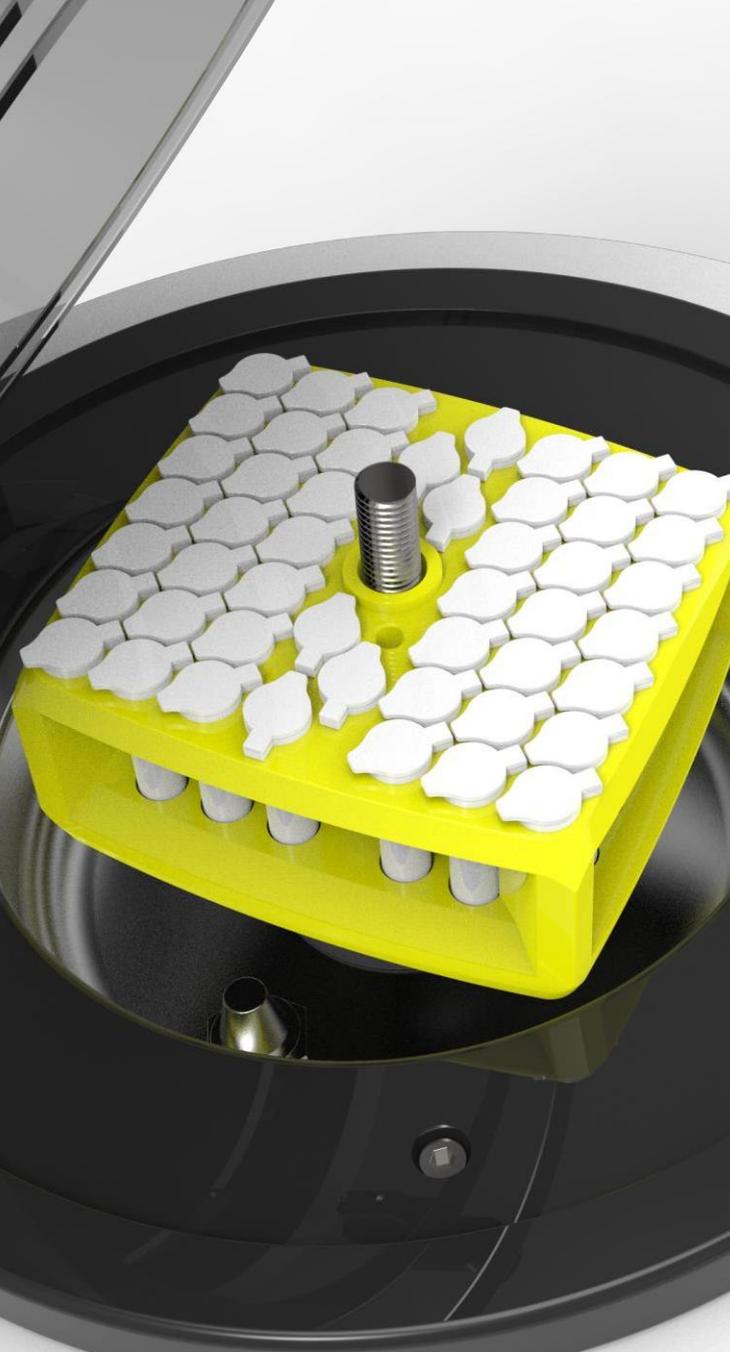
The instrument is suitable for sample crushing, grinding, mixing, homogenization and cell disruption in food, medical, biological, metallurgical, chemical and environmental applications. It is widely used in the extraction of DNA, RNA and proteins.

Designed in line with ergonomics, this benchtop unit features visual operation and a variable-frequency LCD control system, enabling adjustable speed, timing and intermittent grinding modes.

It delivers high-frequency three-dimensional vibration with an amplitude of 35 mm, and the fastest processing time is only 5–30 seconds.

Therefore, the U-GT48 offers comprehensive functions, short processing time, excellent sample preparation performance, low noise, stable operation and simple operation.





## Technical Specification

Name	High Throughput Tissue Grinder
Model	U-GT48
Processing Principle	Crush / friction
Sample Type	Hard / Mid-hard / Crisp / Dry or Wet / Fibrous / Elasticity / Viscosity
Processing Model	Grind / Mix / Homogenize / Cell lysis
Feed Size	< 10 mm
Final Fineness	1~5 $\mu$ m
Grinding Mode	Dry / Wet / Frozen
Motion	3D Figure-8 Orbital Motion
Motion Amplitude	35 mm
Speed Range	180~3000 rpm
Acc/Dec	0 ~ 10s
Locking Pins	Central Positioning Fastening Device
Display	LCD screen
Main Function	Continuous & Intermittent   Variable Speed   Timing   Power-off Memory   Temp. Detection   Liquid Nitrogen Port   Condensate Port
Accessories	PC Flip Cover   Low-Temperature Grinding SS Chamber   Insulation & Heat Dissipation
Processing Time	10 s ~ 2 mins
Time Setting Range	99:99:99 (h:m:s)
Grinding Container	Jars / Adapters
Material of Jar	Tungsten Carbide   Zirconia   Stainless Steel   MC Nylon   PTFE
Jar Volume	2 pcs
Jar Volume	15 ml x 2   25 ml x 2
Ball Material	Tungsten Carbide   Zirconia   Agate   SS
Ball Size	1 ~ 25 mm
Tube Size	0.2 ml   0.5 ml   2 ml   5 ml etc.
Adapter	0.2 ~ 2 ml x 48 / 5 ~ 15 ml x 8
Adapter Material	MC Nylon
Centrifuge Tube	EP Tube
Power Supply	100~240V, 50/60Hz
Power Consumption	150W
Net Weight	28 kg
Overall Dimension	380x480x350 mm
Protection Class	IP65
Standard	EU
Option	Liquid N2

### Working Principle

Under the action of the geometric structure of the grinding carrier and the special figure-8 movement mode, the high-frequency and high-intensity collision between the grinding medium and the sample finally achieves an extremely excellent grinding effect, which is characterized by fast processing speed,



## Product Features

- Small size, light weight, benchtop operation, ergonomic design;
- Multi-purpose, suitable for cell and tissue disruption, homogenization, mixing and grinding;
- Capable of processing gram-level micro samples and diversified batch samples;
- 10mm thick visible PC transparent flip cover, sound-insulating, more convenient for operation and observation;
- 304 stainless steel grinding chamber and aluminum alloy platform provide a clean and pollution-free grinding environment;
- Visible centrifuge tube adapter for observing sample crushing status;
- Lightweight synthetic nylon centrifuge tube adapter, easy to move, and can be used as a bracket;
- Ideal processing results can be obtained in an extremely short time of 10 seconds to 2 minutes, fast and efficient processing;
- Multiple adapters of different volumes are available to meet the needs of different processing capacities;
- Adapters of different specifications are universal, and users can quickly disassemble, replace and install them by themselves;
- Dry grinding, wet grinding, and can be connected to liquid nitrogen tank for low-temperature grinding;
- Simpler LCD operation program realizes multiple functions such as timing, speed adjustment, variable speed, continuous and intermittent operation;
- Equipped with temperature detection, sound insulation and heat dissipation;
- The instrument has low power consumption, low loss, long service life and low consumable cost;



### Centrifuge Tubes Adapter (Quantity x Volume)

48 x 0.2ml	48 x 0.5ml	48 x 1.5ml	48 x 2ml	8 x 5ml	12 x 5ml	8 x 7ml
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### Cytotube Adapter (Quantity x Volume)

48 x 2ml	24 x 3ml	8 x 4ml	8 x 5ml	12 x 4ml	12 x 5ml	
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### Jar (Quantity x Volume)

2 x 15ml	4 x 15ml	2 x 25ml
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