### <u> UIP400MTP – Microtiter Plate Ultrasonicator</u>

www.hielscher.com/uip400mtp

Ultrasonic processor UIP400MTP



# Technical Details

The UIP400MTP is a 400 watts, 20kHz ultrasonic processor for the reliable and reproducible ultrasonic sample preparation of multi-well plates / microtiter plates. Smart software and an intuitive menu ensure user-friendliness and simple operation. A built-in heat exchanger with recirculation pump allows the microtiter plate to be cooled or tempered during sonication. A laboratory cooler is required for this purpose (not included). The UIP400MTP has a coolant inlet and outlet. The PT100 temperature sensor can be placed in one of the sample wells for temperature monitoring and control.

#### Advantages

**Effectiveness**: Powerful, state-of-the-art ultrasonic device with 400 watts power

**High-Throughput Sonication:** 1-1536 samples per run, completed within minutes

**Use Your Own Plates:** No reoccurring costs for proprietary consumables **Cost-Efficient:** One-time investment at a highly reasonable price, no proprietary consumables

**Compatibility:** Compatible with standard buffers and kits. **Non-Contact Sonication:** Prevents cross-contamination

**Industrial Grade:** Suitable for 24/7 operation

**Reproducibility**: Exact reproducibility by full control over the parameters such as energy input (Ws/mL), amplitude, temperature **User-friendliness**: Designed for easy use and reliable results. The smart features allow to program and pre-set various sonication modes (e.g., energy input, amplitude, cycle mode, temperature, time)

**Automation:** Suitable for integration into automated systems

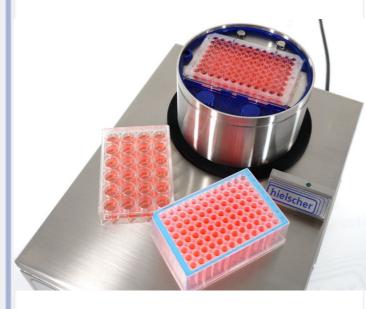
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## <u> UIP400MTP – Microtiter Plate Ultrasonicator</u>

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Are you tired of buying over-priced proprietary consumables and/or expensive lysis kits for your ultrasonicator?

If the answer is yes, the UIP400MTP multiwell plate sonicator should delight you! Use your own consumables, i.e. the multiwell plates of your choice! Use your standard consumables, which are most suitable for your sample preparation and save money!



#### **Cell Lysis**

- Mammalian Cell Lysis
- Plant Cell Lysis
- Bacterial Cell Lysis
- Yeast Cell Lysis

Tissue Lysis and Extraction

- Fresh Frozen Tissue Lysis
- Formalin-Fixed, Paraffin-Embedded (FFPE)
  Tissue Extraction

DNA, RNA, and Total Nucleic Acid Extraction Cell-Free DNA (cfDNA) from Plasma

**Protein Extraction** 

Chromatin Shearing DNA Shearing RNA Shearing

Extraction from

- Mammalian Cell Cultures
- Plant Cell Cultures
- Bacterial Cell Cultures
- Yeast Cell Cultures

Compatible with standard buffers and kits. With the UIP400MTP, we offer you a high-throughput ultrasonicator for protein extraction and DNA, RNA and chromatin shearing. Suitable for cell cultures and FFPE tissue.

The UIP400MTP high-throughput ultrasonicator facilitates the uniform sample preparation for NGS library prep, genomic, proteomic, metabolomic, and biomarker diagnostics.



#### **Ultrasonic Processor UIP400MTP**

- with digital touch display + sophisticated software
- ✓ programmable settings
- built-in SD card for automatic data protocolling

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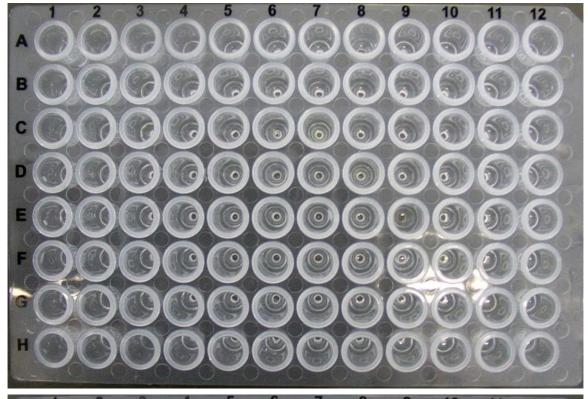
### **UIP400MTP – Multiwell Plate Ultrasonicator**

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## **Uniformity Test via Emulsification**

Uniform treatment is key in sample preparation.

The results of the emulsion test visually demonstrate the uniform ultrasonic intensity of the UIP400MTP. The upper picture shows the clear water-oil mixture in a 96-well plate before sonication. The second picture shows the ultrasonic emulsions after 1 min treatment. All wells show the same loss of transparency, which indicates a uniform emulsion in all wells.





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