

# Mono1 Printer

**Mono1**



**Tool Type:** Digital Light Processing (DLP)-based 3D Printer

**Location:** Elings Hall 2436

**Manufacturer:** monoPRINTER

**Principal Scientist**

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## About

Mono1 is a resin printer that uses a projector to polymerize the resin. It uses a proprietary software called Monoware to slice your object and interface with the printer. On Monoware one can upload an STL file from any CAD software and adjust the settings so the software slices the part automatically.

# Detailed Specifications

- \* **Print thechnology:** DLP
- \* **Projected image:** 1280 x 800 px
- \* **Pixel resolution (XY):** 25 - 45  $\mu\text{m}$
- \* **Layer thickness:** 5 - 100  $\mu\text{m}$
- \* **wavelength:** 405 nm
- \* **Print Speed:** 25.4 mm/hour (varies with resins and layer thickness
- \* **Z-precision (motor-driven):** 25  $\mu\text{m}$
- \* **Max build volume:** 96 X 56 X 130 mm (700 mL)
- \* **Connectivity:** Wireless connectivity via USB
- \* **Slicer Software:** MonoWare

# Safety Concerns

- Read the manufactures manual before first use. If the Mono 1 printer acts in a way that is not described by the manual, turn off the printer and contact monoPRINTER.
- Never place your finger near the machine until all parts have stopped moving. Moving parts can cause serious injury
  - Never clean or service the printer while it is on
  - The printer uses UV light for curing. Never look directly at UV light nor expose skin. Serious injury may result from exposure
  - Always ensure that equipment is correctly mounted before use. Improperly mounted print beds, build platfomrs can be dangerous. If any equipment appears damaged, turn off the printer, unplug all connections and contact monoPRINTER.

# Operating Procedures

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# Reference Documentation

mono3manual.pdf

# Training Documentation

From:

<https://bpm-wiki.cnsi.ucsb.edu/> - NSF BioPACIFIC MIP Wiki

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