

MEKUVA

# AKAR 1000 PRO



**Modular 3D Printer: IDEX Head,  
Laser Engraving & Large Bed Size**

**mekuva**  
TECHNOLOGIES

📞 +91 8686700666  
🌐 [mekuva.com](http://mekuva.com)

## KEY FEATURES

**1050x1050x1100mm (XYZ) Build Volume Industrial 3D Printer**  
**Modular Toolhead Design (Opt : Laser, Pellet)**  
**User Friendly Interface**  
**Touch Screen for Standalone Printing**  
**USB & WIFI Connectivity with IoT**  
**Filament Supply Sensing**  
**Power Outage Recovery**  
**High-Resolution Prints with Heated Bed**  
**Multiple Printable Materials**

### Modular Toolhead Design

Support for Multiple types of Toolheads

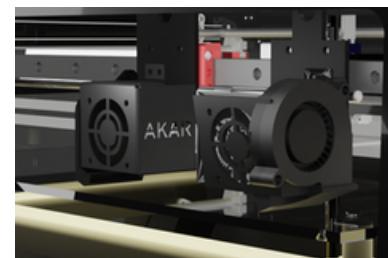


Modular Toolhead Design: Unlock the potential of multi-technology with the Modular Toolhead. It not only masters 3D printing of large-scale objects but is also your gateway to future tech like **pellet engraving, cutting, and extrusion**. Embrace versatility with easy-to-swap **modules** for an ever-growing array of functions. It is engineered to evolve with your creative needs, ensuring you stay ahead in the dynamic world of additive manufacturing.

Dive into a world of limitless possibilities with VersaPrint.

### IDEX Support

Support for Multiple types of Toolheads



IDEX Toolhead: Big-scale 3D printing perfected. Double your output with **mirror & duplication** modes, crafting up to 1m objects with unyielding precision at **half the time**. Ideal for expansive prototypes or art pieces, our toolhead merges seamless integration and consistent performance. Simplify your creative process and scale up effortlessly. Your imagination is the only limit.

Embark on grand-scale printing with IDEX Toolhead.

### Silicone Heater

100 °C in just 10 minutes (2200 Watt)



### Power Loss Print Resuming feature



### Range of filaments

PLA / TPU / TPE / PETG / PVA /  
Glass Fiber Infused / Carbon Fiber  
Infused / Metal Fill / Wood Fill /  
(Optional Pellets)



### Hiwin HGR15C XY Linear Motion

Perfect linear motion for XY axes helps the machine to achieve excellent 3D prints.



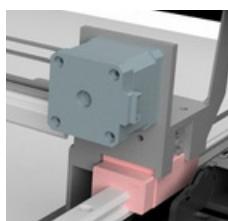
### Unibody Metal Design

Precision Crafted: Experience the sophistication and durability of our Unibody Metal Design."



### CNC Machined Parts

Our CNC milled blocks ensure perfect XY alignment for repeatable dimensional accuracy in prints.

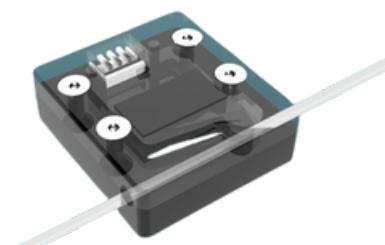


### Get the Full Experience

- With 7 inch touch screen
- High-Speed Printing
- Improved Print Quality
- Advanced Calibration
- Flexible & Responsive UI

### Filament Run-out Sensor

Automatically stop printing when filament runout and resume printing when replacing the new filament



### Supports 5 kg Spools

Print large objects requiring 2 KG or more material without worrying about changing the material mid-job



### Closed Loop Steppers

Our Machine ensures 15-day continuous, fail-free prints without layer shifting problems



## TECHNICAL SPECIFICATIONS

<b>Build Volume (WxDxH)</b>	<b>1050x1050x1100mm</b>
<b>Machine Size (WxDxH)</b>	<b>1960x1620x1800 mm</b>
<b>Print Technology</b>	<b>FDM/FFF</b>
<b>No. of Extruders</b>	<b>Single / Dual (Modular, Optional Pellet Extruder)</b>
<b>Printing Speed</b>	<b>30-300 mm/s (30-200 mm/sec recommended)</b>
<b>Build Plate Type</b>	<b>Aluminum Plate with Toughened Glass, Optional: PEI Sheet</b>
<b>Max Build Plate Temp.</b>	<b>120°C</b>
<b>Heating Bed Element</b>	<b>Silicone Heater</b>
<b>Filament Compatibility</b>	<b>PLA / TPU / TPE / PETG / PVA / ABS / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill / (Optional Pellets)</b>
<b>Max Nozzle Temp.</b>	<b>300°C</b>
<b>Max Power Usage</b>	<b>3000 w</b>
<b>Supported File Format</b>	<b>GCODE &amp; UFP</b>
<b>Supported Software</b>	<b>Mekuva Slicer, Simplify3D, Cura, Orca, PrusaSlicer</b>
<b>Product Weight</b>	<b>350 Kg</b>
<b>Supported Spool Sizes</b>	<b>1 Kg, 1.5 Kg, 2.5 Kg and 5 Kg</b>
<b>Compatible Nozzle Sizes</b>	<b>0.4, 0.5, 0.6, 0.8, 1.0, 1.2 mm</b>
<b>Bed Leveling</b>	<b>Automatic Mesh Levelling, 36 point leveling</b>
<b>Printer Display (Control)</b>	<b>8" Full Colour Touchscreen with IoT Smart Connectivity</b>
<b>Complementary Accessories</b>	<b>Scraper, Side cutter, Nose pliers, Nozzle changing wrench, Glue stick, Extra heater and thermistor, Hotend setup, Pendrive, Spirit level, Allen key set, Extra nozzles, 1 Kg PLA Filament, and extra screws.</b>

## Industrial 3D Printers For High-Tech Manufacturing



**Enabling You to Prototype Faster and Better**

At Mekuva Technologies Pvt. Ltd., we are experts in prototyping, specializing in the production of professional 3D printers and offering a range of services including 3D printing, industrial design, and various traditional manufacturing services. Our portfolio boasts collaborations with entrepreneurs, startups, and industry leaders. We firmly believe that commitment holds paramount value in business. Regardless of your company's size, expect unmatched and consistent high-level customer support from us.

The company ensures consistent quality in every product by conducting thorough inspections for mechanical integrity and wiring at each stage of production. Each machine undergoes checks for free axis motion and perpendicularity, in addition to wiring inspections. Every 3D printer is electrically insulated to prevent loose connections, and we use the recommended gauge electrical wires and mechanical components for the assembly of each machine.

## Other Services We Offer

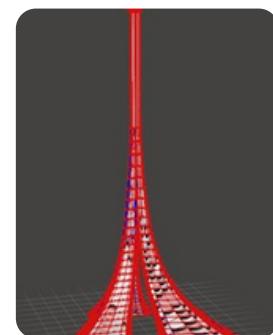
### 3D Printing Services



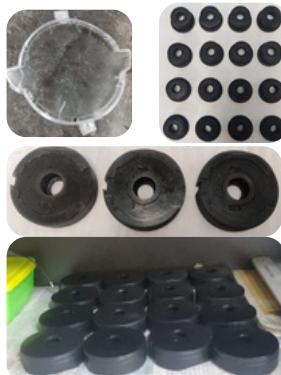
### 3D Scanning



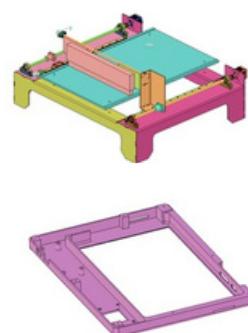
### Part Design Optimization



### Vacuum Casting



### CAD Designing



### Traditional Production Services



## Client Installations



## About Mekuva Technologies Pvt Ltd

Mekuva Technologies Private Limited is a manufacturer of Industrial-grade 3D printers. Dedicated to providing users with powerful 3D printers and high-performance materials.

## Contact

+91-8686700666, +91-9494338215  
[contactus@mekuva.com](mailto:contactus@mekuva.com)  
 H.no 13/173, First floor, Sifco road,  
 Near Elico Limited, Balanagar  
 Industrial Area, Hyderabad,  
 Telangana, India-500018