# AKAR 1000



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









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# **KEY FEATURES**

1050x1050x1200mm (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

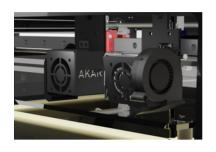


Modular Toolhead Design: Unlock the potential of multi-technology fabrication with the Modular Toolhead. It not only masters 3D printing of large-scale objects but is also your gateway to future tech like laser engraving, cutting, and pellet extrusion. Embrace versatility with easy-to-swap modules for 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, toolhead merges seamless our 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 5 minutes (1200 Watt)



#### **Hiwin HGR15C XY Linear Motion**

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



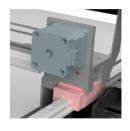
#### **Unibody Metal Design**

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.



#### Power Loss Print Resuming feature



# Klipper

#### **Get the Full Experience**

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

#### Range of filaments

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



#### **Ball Screw for Z-Axis**

Helps in smooth and long life of Z-axis motion system



#### **Supports 5 kg Spools**

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



5 KG Heavy Spool

#### Filament Run-out Sensor

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



#### **Modified MK8 Hot-end**

Our reengineered MK8 hot-end prevents nozzle clogs and ensures 15-day continuous, fail-free prints







### **TECHNICAL SPECIFICATIONS**

Build Volume (WxDxH)	1050x1050x1200mm
Machine Size (WxDxH)	1960x1620x1800 mm
Print Technology	FDM/FFF
No. of Extruders	Single / Dual (Modular, Optional Pellet Extruder)
Printing Speed	30-300 mm/s (30-200 mm/sec recommended)
Build Plate Type	Aluminum Plate with Toughened Glass, Optional: PEI Sheet
Max Build Plate Temp.	120°C
Heating Bed Element	Silicone Heater
Filament Compatibility	PLA / TPU / TPE / PETG / PVA / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill / Nylon / PC (Optional Pellets)
Max Nozzle Temp.	300°C
Max Power Usage	3000 w
Supported File Format	GCODE & UFP
Supported Software	Mekuva Slicer, Simplify3D, Cura, Orca, PrusaSlicer
Product Weight	350 Kg
Supported Spool Sizes	1 Kg, 1.5 Kg, 2.5 Kg and 5 Kg
Compatible Nozzle Sizes	0.4, 0.5, 0.6, 0.8, 1.0, 1.2 mm
Bed Leveling	Automatic Mesh Levelling, 36 point leveling
Printer Display (Control)	8" Full Colour Touchscreen with IoT Smart Connectivity
Complementary Accessories	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.





# 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



Vacuum Casting



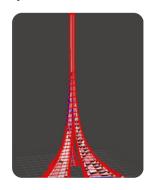
3D Scanning



**CAD Designing** 



Part Design Optimization



Traditional Production







#### **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.

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